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ESSAYS, MONOGRAPHS, AND CASES.

Dropsy and Albuminous Urine: A Clinical Lecture, delivered at the Baltimore Infirmary, June, 1859. By Professor CHARLES FRICK, M.D., &c.

During the past few weeks, gentlemen, there have been several cases of disease admitted to the wards, having certain features in common, but which nevertheless depend on different pathological conditions: these are dropsy and albuminous urine. And as the material is sufficiently abundant, I propose to speak to you of the relation these bear to each other, and of the various alterations with which they are associated.

In the first place, I must tell you that dropsy is an effusion of serum from the blood-vessels, into the cellular tissue, or one of the serous cavities, or both; and that it is produced by two causes. The one, a mechanical impediment somewhere in the course of the vessel, whereby the blood is prevented from returning to the heart, which thus becomes engorged to such a degree that the serum soaks out, to relieve the distention; and the other, an alteration in the composition of the blood, which has become more watery, and readily escapes into the surrounding textures, more particularly as the coats of the vessel have undergone some alteration, in conse-

quence of their being improperly nourished. Now, these two causes combined—that is, mechanical obstruction and thinning of the blood—when they exist together, are almost certain to occasion dropsy, although either may do it separately. And, as we shall see presently, when any pathological condition exists in which these two are present to a decided degree, then are we most apt to have a large amount of dropsy. But you are also aware that fluid is poured out as a result of acute inflammation. You have remarked occasionally, that common phlegmonous inflammation gives rise to pitting from œdema of the surrounding cellular tissue; and you have had ample opportunity to observe the frequency with which a liquid effusion attends an attack of pleurisy. Now, in these cases, neither of the conditions I have just alluded to are necessarily present; the blood is not altered, nor is there any mechanical impediment to its return. But one circumstance, however, is particularly remarkable. The fluid does not consist of serum alone, as in the first instance, but of liquor sanguinis; that is, serum, with fibrin in addition; the latter undergoing coagulation, and producing the fibrinous bands and adhesions, so commonly a result of acute inflammation, and which no doubt serve, in many instances, to repair in a measure the injury inflicted by the disease. I say that the effusion in one instance is serum, and the other liquor sanguinis. This is not invariably true, but is so commonly correct, that practically we may assume it always occurs.

The effusion, then, in these two cases, is entirely different; and without attempting to enter too deeply into the explanation of this difference, I will merely say, that if the accident in the first case is attributable to mechanical causes principally, independent of the blood-vessels; in the latter, the blood-vessels alone are concerned. In ordinary dropsy, the serum escapes, because the blood is thin, and is prevented from returning to the heart; while in an inflammatory effusion, liquor sanguinis is poured out, because the capillary vessels of the part are the seat of a morbid accumulation, from some cause inherent in the part itself. And I beg you to bear these two distinctions clearly in view, for otherwise you will scarcely have a just appreciation of the two different pathological conditions—that is, dropsy on the one hand, and inflammatory effusion on the other. It is true, you cannot always say which of the two is present in a case under consideration, yet nevertheless the principle is correct, and generally the one can be recognized from the other with tolerable certainty.

But to return to dropsy. If you will bear in mind that a serous effusion, whether in a serous cavity, or in the cellular tissue, is due to

mechanical obstruction and impoverished blood, you will realize that when the dropsy is local, the cause must be local; and if general, the cause must be general. Thus, aneurism of the popliteal artery produces œdema of the leg below the knee; femoral aneurism, of the whole leg; and an enlarged uterus, by the pressure it occasions upon the iliac veins, will oftentimes be attended by dropsy of both lower extremities. These are instances of simple mechanical pressure. Again, if the obstruction be seated somewhere in the heart, so that the lower cava is interfered with, the whole of the lower part of the body is involved; while a thoracic aneurism, pressing on the vena innominata, has more than once given rise to dropsical swelling of the upper portion of the body alone; and you can understand also, that if the portal vein, which you know carries the blood of the intestinal canal through the liver, be obstructed in its course, the resulting effusion must make its appearance in the peritoneal cavity. These, too, are examples principally of mechanical pressure. As an illustration of dropsy occurring in persons whose blood is more watery than in health, you will observe that women whose constitution is weak, and whose tissues and muscles are flabby, are prone to have their legs swollen after standing or walking, and that this puffy condition is always aggravated towards the close of the day. But, as I said just now, dropsy to any extent most often depends upon the two conditions combined.

Now, the explanation of the dropsy resulting from kidney disease is not so obvious as the others. You are aware that a large portion of the kidney is made up of small tubes, communicating with blood-vessels, and these in turn with the Malpighian bodies, which are so largely distributed through the cortical portion of these organs. And you can readily understand, that if structural alteration has taken place in these tubes, so that the circulation through the gland is obstructed, they must become more or less congested, and serum will be poured out, which, mixing with the urine, passes off by the bladder, and its albumen may then be coagulated by heat and nitric acid. And the same result will take place from congestion occurring from other causes. This serous drain, then, in a very short time has a decided effect in deteriorating the blood, rendering it thinner and more watery; and as the obstruction to the blood in the kidneys, from the proximity of the renal arteries to the aorta, would be very soon felt in the circulation generally, we would have presented the two conditions most likely to occasion dropsy, namely, deteriorated blood, and interference with its transit through the vessels. But there is this peculiarity about renal dropsy. It usually makes its first appearance

in the looser portions of the cellular tissue, as the eyelids, the scrotum, &c., or in those places where it meets the least resistance, and which are most distensible. And now you will understand why it is that general dropsy must be due to some general cause, interfering with the circulation; why cardiac dropsy should be first evidenced in the lower extremities; that from diseased liver in the peritoneal cavity; and renal dropsy in the looser portions of the areolar tissues. So much, then, for dropsy.

I have just said that when the circulation through the kidneys is interfered with, serum escapes with the urine, and its albumen may be detected by heat and nitric acid. And if, in addition to this obstruction, the blood is deteriorated, either from the drain of albumen constantly going on, or from causes seated elsewhere than the kidneys, the escape of serum is more decided, and its albumen more abundant. You will readily appreciate, then, that albuminous urine does not always denote disease of the kidneys. It is often occasioned by heart disease, and may be produced by pressure on the renal veins; and I need scarcely remind you that if the urine contains pus, the albuminous liquor in which the globules float is coagulable by heat. When, therefore, albuminous urine is present, you cannot necessarily diagnose renal disease; for this is to be made out by other phenomena, and by the assistance of the microscope, of which I shall have more to say to you another time.

Now let me endeavor to show you, in a few words, the application of the principles I have thus far laid down to several cases of disease which we have had under care within the past few weeks.

CASE I.—The first is the man who entered the Infirmary April 28, and left on May 20, named Lynch. I found him much emaciated, and very pallid. His legs and scrotum very œdematous, and there was a considerable amount of fluid in his abdominal cavity. He had very decided dyspnœa, and coarse râles could be detected over both lungs posteriorly. His pulse was weak, intermittent, and irregular, and beat 118 times in the minute. His urine very high colored, of a sp. gravity of 1.023, and amounted to 13 oz. in the twenty-four hours. Both heat and nitric acid threw down a copious precipitate, but under the microscope nothing was perceptible but a few amorphous crystals of uric acid. On examining his heart, I detected a loud, rough murmur, taking the place of the first sound, and most evident towards the apex of the heart. He told us that he had had rheumatism some years since; that for some time he had labored under difficulty of breathing, particularly in mounting ascents; and that the dropsy, which first made

its appearance in the lower extremities, had commenced about four months previously. Now what was the alteration in this case? Manifestly an insufficiency of the mitral valve, allowing regurgitation. And I recognized it in this way. The heart, in contracting, forces the blood through the aortic and pulmonary orifices, and at the same time the auriculo-ventricular valves should close, so as to prevent the blood passing from the ventricles into the auricles. And synchronous with this, the first sound occurs. A murmur dependent on valvular alteration occurring with the first sound, must therefore be due either to stricture of the aorta or pulmonary artery, on the one hand; or to an insufficiency in the mitral or tricuspid valves on the other. As it was more evident towards the apex of the heart, I concluded it was the latter; and as there was no regurgitation in the veins of the neck, and as disease of the left side is more common than the right, I assumed it to be in the mitral valve. Now, in what way are the dyspnœa, the dropsy, and the albuminous urine dependent on this condition? In the first place, if the blood regurgitated into the left auricle, this would be first distended, then the pulmonary veins, then the pulmonary artery, and in turn, the right ventricle, the right auricle, and the cavas. The distention of the pulmonary vessels would give rise to the dyspnœa, and in time the obstruction of the cavas, particularly the lower, from its having gravity to overcome, would become more distended, and allow the escape of serum into the cellular tissue of the legs first, and subsequently into the abdominal cavity. The same cause would produce congestion of the kidneys through the renal veins and the serum thus poured out would pass off by the kidneys. That the albuminous urine did not depend on structural alteration of the kidneys, I was satisfied; partly because there was no evidence of such a condition revealed by the microscope, and partly because the whole phenomena could be explained by the cardiac affection. The indications for treatment were very plain: to lessen the amount of fluid in the circulation generally, either by the skin, the kidneys, or the bowels, and to support the strength. Accordingly, he was ordered squill, asafœtida, and oil of juniper. Under this treatment, his urine was increased to twenty-three ounces, but with no marked benefit. He was then ordered sal rochelle, which occasioned two or three loose serous discharges daily, under which his dyspnœa subsided, and his dropsy sensibly diminished. He left us, however, in the course of a few weeks, his condition more comfortable, but not materially improved.

Case II.—The second case is at present under treatment, and is of

more interest. Lewis Snyder, aged 45, in St. Vincent's Ward, entered the house June 7th. He is a pallid man, and says he was not sick until six weeks before his entrance. Has never had rheumatism, but admits that for some time past he has had difficulty in mounting ascents. He had no dropsy, his dyspnœa was extreme, and his pulse small, contracted, irregular, and 128. His urine had been very copious, but latterly has undergone a marked diminution, and was at entrance 17 ounces, high colored, specific gravity 1.022, and highly albuminous. Dullness over his heart much increased, and the pulsations very vigorous, although irregular. The apex is felt in its normal position, but there is also distinct pulsation at the ensiform cartilage. Above the sternum there is no unusual pulsation, nor can any blowing sound be heard anywhere in the cardiac region. There was nothing unusual in his lungs, except râles throughout, mixed also with dry sounds. A microscopic examination of the urine revealed nothing of importance.

Now what is the diagnosis in this case? The most marked symptom was the difficulty of breathing, produced evidently by swelling in the membrane of the bronchial tubes, and the secretion poured out in them as a consequence. This was scarcely catarrh; it did not commence as such attacks do, and moreover was associated with a very irregular action of the heart, and a kind of dyspnœa, which I have more than once pointed out as belonging rather to the heart than the lungs. That the right ventricle is hypertrophied in this case, is proved by the increased dullness and pulsation at the ensiform cartilage, while at the same time its apex is found in the normal position. For although the heart may be displaced to the right side by various causes, so that the apex may be felt at the ensiform cartilage, yet in such cases there will be no pulsation in the normal position. The right ventricle, then, is enlarged, but will this explain the difficulty? I think not. Regurgitation of the tricuspid or mitral valves would give rise to a decided blowing sound, which there is not; while contraction of the tricuspid would be more likely to occasion dropsy, and pulsation of the jugular veins. But assuming that there is contraction of the mitral valve, the solution is easy. In the first place, the blood passes from the auricle to the ventricle, partly by the contraction of the first, and partly by the dilatation of the latter. Nor is it impelled with sufficient force to give rise to a murmur, while the healthy semilunar valves, flapping back into their place, are quite sufficient to occasion a clear second sound. If, then, the valve be contracted, the usual amount of blood is not received in the left ventricle, nor sent by the

aorta to the various arteries. The pulse, therefore, was small and contracted. In the second place, the auricle must have been unnaturally distended, and thus an excess of blood was accumulated in the pulmonary vessels and the lungs. This explains the dropsy. This accumulation would be felt more or less throughout all the organs, the kidneys among the rest, and the albumen found in the urine was but a result of these organs relieving themselves of the superabundant serum thus forced upon them. So much, then, for the diagnosis.

The indication for treatment was manifestly to relieve the engorged vessels by some drain, which would at least afford temporary relief, and at the same time to support the general strength. Accordingly, he was ordered

Asafœtidæ, gr. j.
Scillæ pulv., gr. iij.
Ol. Juniperis, gtt. ½, every 4 hours.

I did not prescribe digitalis, veratrum viride, or any similar agent, although the pulsations were both too frequent and too forcible, because I considered these were but evidences of the degree to which the heart was obliged to labor to overcome the impediment; and a sedative of this character might lower the frequency and moderate the impulse, but it would unquestionably render the heart more irregular, and increase the dyspnœa. In two days after the commencement of the treatment our patient was able to lie down, and his cough had much diminished. In a week all difficulty of breathing had disappeared, the pulse became fuller, more infrequent, and perfectly regular. The abnormal impulse of the heart had altogether subsided, and his strength had decidedly improved. I would recall to your recollection the fact, that in 24 hours the quantity of urine had increased to 35 ounces, the next day to 56, and has continued between 50 and 60 ounces up to this time. The albumen, too, has notably diminished, and latterly I have ordered him sulph. iron and quinine, for the purpose of improving his strength.

You will remark that in both of these cases I have endeavored to drain off the fluid from the kidneys, in preference to the bowels, and it is for this reason: When liquid discharges from the bowels are produced, it is always a serous fluid, containing various other matters; and as this serum is derived from the blood, such a drain, continued for any length of time, must necessarily weaken the patient to a very great degree, and thus tend to keep up the very causes which originally produced the disturbance. The kidneys, on the contrary, drain off principally the water, and unless the specific gravity of the urine

thus voided is high, it can scarcely be said that any material waste is going on. Do not understand me to imply that waste, and very great waste, may not be produced by diuretic remedies. On the contrary, when the agents are properly selected, as, for instance, the alkalies in rheumatism, very decided emaciation may be produced by their use in a short time. You have more than once seen rheumatic patients in these wards waste most rapidly under the use of large quantities of bicarb. potass., and have remarked at the same time that the urine, instead of containing 600 or 700 grains of solids, had increased to 1,200, and even 1,800, in the 24 hours; and this for days together. Indeed, herein lies, according to the view I hold, as I have more than once told you, the efficacy of these salines in rheumatism. Not, as has been assumed, in neutralizing some assumed element, but in producing general waste, and of course wasting the rheumatic elements, whatever they may be, at the same time. But what I desire to explain to you now is this: When the object is to produce an alterative effect, as in rheumatism and analogous diseases, and the kidneys are the means selected to eliminate the morbid substances, the solids are of every importance, the fluid in which they are dissolved of little or none. Thus, 800 grains of solids in such cases is a decided improvement over 400; but whether the 800 grains is dissolved in 20 or 40 ounces of water, is of secondary importance. On the contrary, when it is desired to obtain a diuretic action, as in heart disease or dropsy, the fluid is all important, the solids less. Here, then, a material point is gained, if the urine is increased from 20 to 40 ounces; but different from the other case, it is much preferable that the solids should remain at 400 grains, rather than be increased to 800, for there is no object in producing waste of tissue. For this reason, colchicum, the salines, &c., are preferable in the first instance, but squill, juniper, and similar agents, in the latter. And in the patient to whom I have just referred, although his urine was increased from 17 ounces to 60, yet the specific gravity fell from 1.022 to 1.009; so that the waste of solids was not materially increased, and he therefore, under good diet, has improved in strength.

Still more interesting than the two cases I have spoken of to-day, are three patients laboring under dropsy and albuminous urine, dependent on kidney disease; but these I must reserve for another occasion.

The Pathology and Treatment of some of the Diseases Incident to Women. By CHARLES FAYETTE TAYLOR, A.M., M.D.

It requires some degree of courage, and a willingness to encounter the charge of temerity, to attempt to put forth any new views on the subject of the diseases of women. Notwithstanding all that has been written, by men who are justly considered as authority on whatever subject they discuss, and with a full appreciation of the advance that our knowledge of these diseases has made in the last few years, as the result of the brilliant discoveries following the perfection of the means of physical diagnosis; and though great improvement has been made in the treatment of these diseases, yet is it not true that the sanguine expectations of the first advocates of topical medication in uterine disease have not been borne out by the experience of the Profession? Who dares at this day to risk his reputation by introducing a new supporter or pessary? And even the caustic has ceased to be the physician's talisman, since so large a proportion of patients once "cured," in a few months return, to his extreme disgust, as bad as before. Or, perhaps, the same case may grace half a dozen case-books, of as many physicians, till at last, falling into the hands of a charlatan, it actually does recover by the aid of *time*, and the wholesome hygiene previously insisted on by the legitimate practitioner: but the quack takes the credit.

But has the subject of the diseases of women been exhausted? Is there nothing further that can be said on the subject? Instances are occurring in every neighborhood where women have had all the symptoms of uterine disease—leucorrhœa, bearing-down sensations, the characteristic backache—who have recovered from all these symptoms without any treatment. Others have recovered after the ordinary treatment had failed to give more than temporary relief. This is not to say that the treatment ordinarily employed (I mean caustics, supporters, and other similar topical treatment) is never useful—for that would be contrary to the fact—but that it is *not always* useful, or even so generally useful as is supposed; and still further, that while well calculated to give temporary relief, it is not competent to insure a *radical* cure; because it does not reach the constitutional condition which constantly tends to produce the disease, during and after the topical treatment, as before. Hence the constant liability to the recurrence of the disease. A radical cure, when it occurs in these cases, is brought about as the effects of *time*. Or, if we would hasten the time and increase the chances of a radical cure, we must look to

some constitutional treatment that shall eradicate or decrease the tendency to the production of uterine disease.

And here I come to my first and fundamental proposition, which is this, viz.: *In the majority of cases, prolapsus, versions, hypertrophies, and induration, ulceration and irregular menstruation, are local symptoms of a constitutional condition.*

They may or may not require topical treatment according to the character and extent of the local manifestation; but a radical cure can only be expected (except, as it often *accidentally* occurs,) through such *general* treatment as the indications of the case require. I am here met with the triumphant citation of those cases of imperfect involution of the uterus following parturition, as conclusively establishing the uterine origin of all the long train of symptoms which subsequently appear. But that is just the case, the pathology of which proves the constitutional origin of the local trouble, with the symptoms flowing therefrom. The question recurs, Why was the involution of the uterus imperfectly performed? Was it because of a mere local incapacity, with a perfectly healthful condition of the general system? Evidently not. There must have been some disturbance of the circulation and the general nutrition—perhaps, indeed, owing to the shock of parturition, none the less constitutional—which prevented a perfect involution of the uterus. If a wound heals badly, we do not suspect the trouble to exist in the wound itself, but in constitutional causes. There seems to be no reason why the same reasoning will not apply to imperfect involution of the uterus after parturition. But even if this were not the case, it has become constitutional before treatment is applied, and should be treated as such.

Another reason for believing that in so many cases the uterine trouble is merely the local manifestation of a general constitutional condition, is the patent fact that all the most distressing symptoms may be present in cases where there is neither displacement, hypertrophy, nor ulceration; though, where they do exist, they no doubt greatly aggravate the existing symptoms, and add more to them. It is too often taken for granted, however, that where there are certain symptoms, they must necessarily arise from disease of the uterus; and if searching investigation discovers the slightest deviation from a perfectly normal condition—so slight, indeed, that it would not be heeded in any other organ—the innocent uterus is subjected to some routine treatment; with what success, the true pathology might suggest.

It is true that a certain number of cases do recover under treat-

ment; but when we witness other cases that apparently recover without treatment, and take into consideration, also, the necessary hygiene that has been enforced—the rest, and, equally important, the *time* that has elapsed—it may be justly doubted how much the *local* treatment has to do with the *permanent* recovery. Let it be understood that it is freely admitted that there are cases of the ordinary uterine derangements of the class indicated above, where the common method of treatment does afford present relief, and often is of permanent benefit; but I believe that these cases are much fewer than is generally supposed; and that even in these cases the constitutional treatment to be proposed in this paper would not only aid in the speediness, but in the permanence, of the cure.

The local disease, individually considered, throws but little light on the constitutional states favoring its existence. We must examine the general conditions of classes and communities, and see if we cannot there discover some condition of constitution favoring the existence of some form of uterine disease, either organic or functional, in a large proportion of the women of this country. If we can find any peculiarity of constitution incident to a class, and can trace a connection between it and the frequency of uterine disease in the same class, then we may be able to determine with more accuracy whether this constitutional state precedes as a cause the local manifestation, or the latter precedes the former.

Our grandmothers and great-grandmothers did not even know of the existence of those peculiar diseases that so afflict their granddaughters. We may properly infer that with them these diseases did not exist; or, if they did exist, the fact would prove the whole argument, for they had not power to produce sufficient constitutional disturbance to make the individual aware of their existence. There are communities to-day where women are no more afflicted with the forms of disease under consideration than our progenitors were. Dr. G. H. Taylor, while on a visit to Stockholm, Sweden, reports that, among several hundred patients at different institutions, *only three* had any form of uterine disease; and on inquiry, the physicians assured him that these diseases are almost wholly unknown in that country. Swedish physicians are second to none in Europe; and if they had existed, must have known it, as they were familiar with its existence in other countries. Let it be remembered, however, in this connection, that the Swedish ladies of the highest class not only attend to their own household affairs, but multitudes systematically practice at the public gymnasia; and the poorer women, as the Delecarlians,

labor in the open air. Even in England, I know, from personal observation and inquiry, that such diseases are much less common than in this country; and it is well known that an English lady not only possesses a good degree of muscular strength, but she is not afraid to put it to daily use.

I do not wish to unnecessarily reproach my countrywomen—possessing, as I believe they do, in a higher degree than the women of any other country, some of the noblest virtues that adorn the sex; but if there is anything in their surroundings or habits of life that favors the production of the diseases under consideration, the physician would do less than his duty did he not point it out to them. I know it is often said that the women of the country, and even the wives and daughters of farmers, who are accustomed to daily labor, are subject to the same diseases as the wealthy inhabitants of the city. But the condition of women in the country is far from favorable to the promotion of robust health. It is not similar to the condition of any other class of women in the world. Educated in the same schools, certainly in the same literature as their more wealthy sisters of the city, and numbering scarcely less of the accomplishments; vieing with their brothers even in the higher mathematics, establishing a high degree of mental, and totally neglecting physical culture, they are in the most favorable condition to speedily break down on assuming the cares and labors of the farmer's wife. This process is wonderfully accelerated by the precocious sensibility of the nervous system, generated by an absurd stimulating system of education. Too great, as well as too little muscular activity, will produce precisely the same atonic condition of the muscular system.

During the continuance of the whole course of boarding-school education for young ladies, there could not be a more ingenious device for rendering them physically weak and inefficient. The daily walk of a drove of these young ladies "around the square," so far as the purposes of physical culture are concerned, ought not to be dignified by the name of "exercise."

Still more pernicious, if possible, than the neglect of well-directed and careful muscular exercise, is the early, almost exclusive, cultivation of *nervous susceptibility*. Nowhere in the wide world are there such well-appearing young girls—taking the well-bred *lady* as the standard—as here; but their manner is that of *ladies*, not of girls. There is a precocious quickness of perception and early formation of character that is quite unphysiological, and stimulated to an inordinate degree by too early introduction to society. The result is, that the capaci-

ties of the system are perverted from tissue-making, and absorbed, as it were, in the sensational life. The body is literally *starved*. With the unnatural cultivation of the sensational and emotional faculties, first the desire, and then the ability to adequate muscular activity, is lost. By the unnatural cultivation of the sensational and emotional faculties, I do not mean an illegitimate cultivation of them—for purer cannot be found than our countrywomen; but their development *before their time*. Let the development of body be far advanced; let the tissues become consolidated; let there be again established a period of romping girlhood between ten and sixteen, and the most of this time devoted to mental relaxation and physical culture, and then the danger will have passed.

This statement has not been overdrawn. The principal of one of the most popular of our city boarding-schools (as it is one of the most deserving) told me, a few days since, that she considered almost every one of her pupils a fit subject for medical treatment. The principal of one of the best ward schools of this city, having over three hundred girls under her care, told me that both teachers and scholars are constantly overworked, and a large per cent. break down, as a consequence, every year. A little girl of thirteen, a member of the same school, was brought to me by her mother for some ailment. She was naturally delicate, was deformed, and had been confined to the bed several years with Pott's disease of the spine. On inquiry, I learned that she had to study from *fourteen* different books! It is not necessary to notice the evil effect upon the mind of such a system.

The consequence is, that few of our women have any adequate firmness of muscle. There is begotten a softness and atonic condition of all the tissues. This condition, of itself, does not imply either emaciation or actual disease, but a lower tone of physical health, *a want of endurance* out of proportion to the size of muscle, and the apparent general health. Indeed, such persons are generally rather plump while young, and in the absence of any untoward circumstances, consider themselves well. But the actual condition of their muscular tissues, compared with a *perfectly* healthy condition, is like the soft, dry, pale pectoralis muscle or breast of a domestic fowl that is seldom used, compared to the firm, juicy, dark-red muscle of the wild birds that use them constantly in flying. The effect of this condition of tissue in its tendency to the production of the diseases under consideration, may be considered under three heads, viz.: that resulting mechanically from the lack of firmness in the tissues; the effect upon the circulation; and the condition of the general nutrition.

1. A little weakness of the muscles of the back, a slight increase of the natural curvatures of the spinal column, a little more than natural inclination of the neck, will cause the chest to sink, and the anterior extremities of the ribs to fall one or two inches, and no one will be able to detect it without contrasting this with the correct position. Thus, the costo-pelvic attachments of the abdominal muscles become approximated, and the muscles themselves relaxed; the contents of the abdomen also, being in the same atonic condition as the other tissues, follow the retreating muscles towards the pelvis. If there be constipation, so much the worse. How could there be a condition more favorable to displacements of the uterus? The uterine broad ligaments, themselves relaxed like the rest, have to support not only the bowels above, but the diaphragm, a powerful muscle, glistening with tendons, is constantly forcing with each inspiration the whole abdominal contents down into the pelvis. Add to all this, as we too often must, heavy skirts, long waists and tight stays, and we have a splendid *mechanical* arrangement for forcing the uterus from its place, slightly suspended at the superior strait of the pelvis as it is, down upon the pelvic floor. The only wonder is that it succeeds no oftener.

Hence we arrive at the first indication for treatment, viz.:

Relieve the uterus from the weight of organs above it by strengthening the muscles of the BACK, CHEST, AND ABDOMEN. This is the best *pessary* that can be used!

2. There are several agencies concerned in the circulation of the blood: the action of the heart and large arteries, capillary attraction, the affinity between the blood and the tissues of an organ in action, and the mechanical pressure of contracting muscle upon venous capillaries. That the heart's action is seriously disturbed in anæmic girls, is well known. But muscles that are but little used have less affinity for the blood, and the mechanical assistance from the pressure of contracting muscle is almost entirely wanting. Hence, no wonder that these cases are notorious for the coldness of the extremities; in many cases, naturally warm feet being a luxury seldom realized; and this coldness often extending above the knees.

Now, with this imperfect circulation—the blood accumulating in central organs—favoring visceral congestions, add the physiological engorgement of the uterine organs at the regular menstrual periods, while, perhaps, these organs are more or less displaced by the previously mentioned mechanical causes; and no wonder that they are so often unable to properly perform their functions. Excessive, scanty, or painful menstruation may be looked for; ulceration of the canal of

the cervix, hypertrophy, and induration, may be expected to follow in natural succession. Hence, we declare the *second* indication of treatment, viz.:

To relieve the uterine congestions, hypertrophy, &c., promote a peripheric circulation by muscular contractions in the extremities while the trunk and visceral organs are in repose.

3. The absence of tonic health of the muscular tissue alone—constituting, as it does, about half of the gross weight of our bodies, and by its active transformations while in healthy use, receiving much the largest part of all our tissue-making food—has a vast influence in deteriorating the plastic quality of the blood, and through the blood, of all the tissues of the body. Hence, we derive our *third* indication of treatment, viz.:

To heal uterine ulcerations and correct abnormal secretions, secure a purer quality of plastic material by the increased oxydation of the blood, consequent on muscular action.

But here, at this point, we have two formidable difficulties to encounter. *Exercise*, as ordinarily understood, cannot be taken by women laboring under diseases peculiar to their sex. Indeed, this inability to take exercise, to walk any distance, to go up and down stairs, and the like, is a good diagnostic symptom in these diseases. The increased soreness and backache, the "bearing-down" sensations attending every effort, and the marked increase of all the symptoms, utterly preclude, in most cases, any effective exercise of the ordinary kinds.

The second difficulty in the way of muscular effort that we have to encounter is the depression of the nervous system, which renders exercise, where it otherwise can be taken, so quickly followed by *fatigue*, that it is often a question whether such attempts do not do more harm than good. The cold feet are often found to be colder, and the symptoms of uterine congestions greater after a walk, than previously; and, instead of refreshing, fatigue and exhaustion are apt to follow. So that it is with some propriety that physicians have ordered *rest*, and even the recumbent posture, in these cases.

But are the objects to be secured by muscular action any the less *desirable* in these cases? By what means can the relaxed tissues, the unequal circulation, and all the train of evils depending on this inability to muscular exertion, be remedied, except through these manifestations themselves?

Fortunately, all these difficulties can be easily overcome. *First, then, the muscles should be brought into action* ONLY *in such positions and*

in such a manner, that none of the symptoms following ordinary exercise can occur. This rule is unvarying. It is easy to see how the muscles of the arms and legs may be brought into the most powerful action, if necessary, while the patient is lying on her back, by the aid of assistants and contrivances, in such a manner that the uterine organs may at the same time be *relieved* by the position, instead of being infringed upon, as in the erect posture. So all the muscles of the back, chest, abdomen, &c., may be brought into action, of any degree of power, in such positions of the trunk and with such a direction of the mechanical force, that none of the ill effects of ordinary exercise can follow.

With reference to the debility of the nervous system, we find that fatigue occurs in the ratio of the *intensity* of the *effort*, and *not* in the ratio of the force of muscular contraction. For instance, to *run* a certain distance will be followed by fatigue; while to *walk* the same distance, taking the same number of steps and using the same muscles, is not followed by any such effects. This rule is unvarying in all possible circumstances of muscular effort. But the effect upon the mass of the tissues is in the direct ratio of the *continuance* of the movement, or the length of time that the muscle is held in contraction, as greater time is afforded for the contraction to propagate itself through the length of the fibres and the mass of the muscle, and for the circulation to arrange itself and plasma to be thrown out. Hence we deduce the following rule, viz.: *To gain the greatest results with the least fatigue, let all movements be done very slowly, and the force of contractions increased by resistance opposed.*

Thus we have perfect control of every movement; can regulate its force most perfectly to the strength of the muscles, and can direct it to any portion of the body. This principle of controlling the circulation by muscular action is beautifully illustrated in cases of ordinary menstrual suppressions, so often met with among school-girls, depending on colds, wet feet, or other cause of deranging the circulation, and before there is serious constitutional disturbance; those cases in which Elixir Pro. is generally employed. If such a patient be seated in an easy-chair, and the mass of muscles inside of the thighs, the adductors of the leg, be made to act powerfully, by slowly drawing the knees apart against the firm resistance of the patient, an actual congestion of the parts adjacent to the uterus can be produced, and menstruation will speedily be established. I have now in my mind several cases of suppression, continuing from three to six months, being re-established in less than a week, by persistence in a similar course.

The treatment here advocated is not only clearly based upon the pathology of that disease, and therefore theoretically correct, but it is entirely *practicable* in its application and beautifully satisfactory in its results; which a few cases, made as concise as possible, to save room, here introduced, will attest.

Case I.*—Mrs. M., thirty-six years old, tall, slightly built, thin and pale, eleven years ago was confined with her first child. Nothing untoward attended that event; she got partly up, and then declined till she took to her bed again. After two years she was able to walk, and was comfortable for the three years following. Then she was treated for uterine disease (prolapsus) for two years continuously.

Feb., 1859.—Uterus slightly prolapsed; great tenderness over the whole abdomen, but without any circumscribed local soreness; most obstinate constipation; had not had a natural alvine discharge for the last three years; great difficulty in walking, especially in going up and down stairs; could take but little exercise, which was followed by the symptoms usual in those cases.

Feb. 9th.—Has commenced to have natural evacuations of the bowels; tenderness of the abdomen has gradually decreased.

March 10th.—Bowels perfectly regular; tenderness of abdomen entirely subsided; gains flesh and strength daily; goes up and down stairs with perfect ease, and considers herself well. Three months after reaching home we hear that she is still gaining strength, and has had no recurrence of the uterine troubles.

Case II.—Mrs. I., aged forty, widow, built much like the case previously described, was attacked a year and a half ago, while on a visit to a friend's, with inflammation of the bowels, with vomiting. The vomiting continued daily for some time. Subsequently was treated for uterine disease of some kind, till coming under our care.

March 14th, 1859.—She complains principally of great soreness in the lower part of the abdomen, and especially in each iliac region. Pressure over the broad ligaments is very painful, and leaves a long-continued aching afterwards; this soreness was so great that she was unable to stand erect; every movement attended with much suffering; could not raise the legs, on account of the pain attending that movement.

April 16th.—Has continued treatment up to this date, when she left. For some time it seemed doubtful about the amount of benefit

* A portion of the following cases were under the more immediate care of my brother and colleague, Dr. G. H. Taylor.

she would receive, the great soreness preventing her from taking only the simplest movements. But as the circulation became better distributed, the ovarian irritation subsided, and after about ten days her progress was uninterrupted. She seems now perfectly relieved of all her former troubles. I ought to mention that the examination revealed not the slightest abnormal condition of the uterus; it was *in situ*, and scarcely larger than a virgin uterus, and for what particular purpose applications were made to that organ it is difficult to imagine. There was no discharge.

CASE III.—Mrs. C., thirty-five years old, a medium-sized, well-formed woman, had been under the care of different physicians for *eighteen years!* Her principal symptom was extreme distress in the immediate vicinity of the uterine organs, with frequent paroxysms of intense pain of a neuralgic character in the uterus. During all this time, according to the history she gave of herself, the treatment was directed to the uterus. As she continued to become worse, opiates were administered to relieve the pain, but that expedient failing, latterly she had used alcoholic stimulants instead. So great was her suffering at the paroxysms of uterine neuralgia, that her physician would often be sent for in the night, sometimes several times in one night, to make an application to the uterus, which would give temporary relief. This was her condition when, on Sept. 22d, 1858, she visited our office. During that first visit she experienced one of the neuralgic paroxysms. The expression of her countenance was that of suffering. Her attention seemed wholly absorbed in the local trouble, and she complained of little else except weakness. There was a slight prolapsus of the uterus and a little congestion, but no more than is often seen in the well organ; no unnatural discharges from any of the parts. At first a few applications of belladonna were made to the uterus, and the treatment, according to the principles previously laid down, was commenced and continued till the first of November following, or about five weeks.

In this case the propriety and efficacy of subduing nervous irritability, by irritating the muscles, was shown in a remarkable manner. In less than ten days the neuralgia and all local pain and distress had entirely ceased, and she remains up to this day, six months afterwards, in good health. Not the least was it that her spirits and temper met with as marked a change as her bodily health.

The principle on which this case was treated, by producing an *alterative* state of the nutrition, directing the nervous energy towards volition and the organic processes of tissue transformation consequent

on muscular action, in order to subdue nervous irritability, is of the greatest importance in these cases.

There are many incurable cases of prolapsus, retroflexion, induration, &c.—incurable so far as bringing about a complete restoration of the organ to its normal position and consistency—that may find relief from much of their suffering, and be made comparatively comfortable, by pursuing the course here indicated. While it is not denied that there are cases where topical treatment is beneficial, still there are many evils flowing from it that it seems impossible to avoid. One of the most important is the fact that the patient's *attention* is habitually directed to the uterine organs, as the cause and seat of every discomfort. The result is a marked state of mind with reference to the seat and character of her disease. There can be no doubt that the local disorder is often greatly aggravated by the state of mind with reference to it. Besides, it often happens that the uterus is bound down by adhesions, and has formed for itself a new bed or locality, and the adjacent parts have become disposed with reference to this condition, and it is both unwise and unnecessary to disturb it. Indeed, in many cases it is impossible to do so. Besides, the constant handling, cauterizing, and disturbance must eventually increase the congestion of the parts.

Why is it that some women—those that present themselves at the college clinics, for instance—walk about in comparative comfort, with an amount of displacement and disease that would lay their more tender sisters on their backs, not with imagined, but with actual suffering? The difference is only accounted for from the fact that sensibility (or irritability) of the nervous system seems to be in the inverse ratio with the cultivation of the muscle. A single example will illustrate this principle. Morrissey and Heenan pounded one another into a jelly the other day, and in a week were as good as new. Every one knows the unfortunate result of the beating upon the Hon. Charles Sumner. No one can suppose that the blows the latter received can compare in severity with those of the former. So that in those cases of undoubted uterine disease, even where from the nature of the case a radical cure cannot be hoped for, a certain amount of relief can still be expected by the treatment here proposed.

Case IV.—Mrs. N. had had a bad getting-up after the birth of her child, seven or eight years before, and during all this time she had been under the care of different physicians, but the precise history of her case, at its various stages, it was impossible to ascertain with sufficient definiteness to recapitulate. She had been confined much to her

bed, and was very much emaciated, weighing only about seventy-five pounds. The uterus was resting on the floor of the pelvis, with the fundus thrown back upon the rectum. She could walk but very little. For some time we tried to keep the uterus *in situ* by frequently replacing it, but all to no avail; in a very short time it would return to its situation, resting on the perineum. For the last three months she was under our care we endeavored to increase her strength up to the point where it would be able to bear the uterine disorder without so great suffering. Proceeding on the principle indicated above, we were entirely successful. She gradually gained her strength, and left for the country, decidedly improved. In about one year she called upon us, so changed for the better as to be scarcely recognized. The uterine trouble still existed, without much change, but the inconvenience arising from it was now reduced to its minimum, and with care she was enabled to enjoy a very comfortable degree of health.

There is one symptom that is so common and so distressing withal, not confined to cases of undoubted uterine disease, but nearly always present in an aggravated form when these organs are in any manner affected, that I cannot pass it over without a moment's consideration. I allude to the backache so generally complained of.

Diseases have their fashions, and a few years ago "spinal irritation" (?) was as frequent as uterine disease is now. Indeed, I know a lady who was delicate at seventeen, and treated for several years by setons, blisters, cuppings, and the whole category of counter-irritants, for "spinal irritation;" then, several years later, without any change in the symptoms, she was subjected to topical treatment for uterine disease; and now, for the last two or three years she has had no medical treatment, she feels rather better, though by no means well.

I believe most fully, with Dr. Thomas Inman, that there is no such pathological condition as "spinal irritation" in the sense in which it is ordinarily used. The sensation of soreness caused by pressure along the spine is not the symptom indicating any known disease of the spinal cord; diseases of the nerves manifest their existence in a totally different manner; but it *is* a symptom of muscular weakness and fatigue. The locality of the pain and soreness is exactly where we should expect it to be when referred to muscular weakness and over-exertion as its true cause. Beginning above, and searching downward, we find this soreness at the base of the skull, at the lower part of the neck, and frequently referred to the prominent seventh cervical spinous process; we find this soreness more marked *each side* of the spine, or near the transverse processes, differing in intensity in

different locations, till you reach the aponeurotic expansion over the sacrum, where it is generally the most severe.

In all cases this aching and soreness is in the vicinity of the origin or insertion of muscles; especially at the musculo-tendonous union. But this is not by any means confined to the back; though, from the mechanical and anatomical relations of the spinal column, it is necessarily somewhat more circumscribed there. But a weak muscle always gives signs of its weakness. This aching and soreness is very constant in these same cases at the origin of the pectoralis major, at the lower border of the breast, and is often erroneously referred to the latter organ, giving the patient indefinite fears of cancer; at the costal insertions, the lineæ transversæ, and particularly at the pubic origin of the abdominal muscles. The soreness and aching at the coccygeal attachment of the muscles of the perineum is obviously produced from the same cause, increasing with the amount of prolapsus and the strain to which these muscles are subjected, especially at the coccygeal attachment.

The weaker the muscle the greater its irritability, and consequently the greater the force employed to accomplish a purpose. The contraction of a debilitated muscle is more like a spasm, and unlike the contraction of a healthy, well-nourished muscle, which uses only so much force as is necessary to accomplish a purpose. Hence, weak muscles are constantly liable to unnecessary overdoing. So the necessary muscular efforts of moving about, or even of sitting up, may be overdoing to very weak muscles. Hence, it is easy to see how this backache and soreness may be kept up for an indefinite period, when the conditions are favorable, by the ordinary muscular effort in sitting or moving about.

Dr. Inman, apprehending the true cause of this symptom, very gravely recommends *rocking-chairs* and the recumbent position as the true remedy. Of course rest to overdone muscles will give relief; but how are they ever to get any stronger? The true remedy is rest *and* exercise. Let the rest be *complete relaxation* of all muscular effort—not the entertaining of company, sitting bolt upright, so that the spinal muscles must be constantly acting; or reclining in a "graceful attitude" on the lounge, with book in hand; but a completely sustained position, when *all* the muscles must cease to act. Then the exercise to follow should be adapted to the special needs of the case, as laid down in the preceding portions of this paper.

Case V.—Miss M., aged fifteen, a school-girl, naturally light and delicate, was brought to me by her father, himself a physician, on the

3d of February, 1859. There was habitual constipation, very little appetite, and general languor; but the overruling complaint was the pain and tenderness in her back. So troublesome was this, that, fearing disease of the spine, she was brought to me for the purpose of adjusting a spinal supporter to sustain the trunk. Her menstruation was normal. After explaining to her father my views of her case, he readily consented to try a different plan of treatment, and placed her under my care. She was ordered to lie down frequently, and rest the muscles of the back in the completest manner, and come daily for appropriate exercises, which she did till the 16th of March, when she returned to her boarding-school cured. Her appetite was good, bowels regular, and there was no aching or soreness of her back, and had not been for several weeks.

The following additional cases will illustrate still further, each in some especial way, the views of the pathology and treatment of some of the diseases incident to women:

CASE VI.—Mrs. D., aged thirty, commenced treatment October 5, 1858. There was great pain in the back, bearing-down pain in the lower part of body, difficulty in walking, tenderness on pressure in the right inguinal region; spirits depressed, &c. At the end of four weeks, all the above symptoms having disappeared, she left. In about two months, in the mean time having passed through a good deal of bodily labor, and been much weakened thereby, she returned, as bad as before. In about the same time she was again relieved of all the symptoms of uterine disorder; grew strong and cheerful, and has remained so ever since. This case illustrates how too great muscular exercise, as well as too little, may produce the same feebleness of tissue, and the same train of symptoms arising therefrom.

CASE VII.—Miss C., aged twenty; weakly from a child; skin soft and fair, hair light; for two or three years had suffered from unintermitting backache, tenderness of abdomen on pressure, leucorrhœa, and great general weakness, with headache, &c. Was often confined to the bed for days; could sit up only a part of the time, and walk only a short distance. Examination revealed slight prolapsus of the uterus and ulceration of the canal of the cervix, which was filled up with the usual glairy discharge. The os tincæ was soft and patulous. To relieve present suffering, applications of belladonna were made for several days, after which it was discontinued. So great was the soreness of the back and lower part of the abdomen, that, with the utmost care, it was some time before she could take movements affect-

ing the muscles of those parts. Commenced July 8th, and left September 16th, greatly improved and nearly well.

Case VIII.—Miss K., aged twenty, also delicate from a child, skin fair and tissues soft, was sick for more than a year, with what her physicians called prolapsus of the bladder; for six months had been confined chiefly to her bed; by using an abdominal supporter she was able to get about a little. Commenced treatment October 26, 1858. She was then able to walk but a few rods, and was obliged to recline the greater part of the time. In three weeks was able to leave off the supporter. From this time her improvement was steady, till she was perfectly restored in two months; having for the last month walked two or three miles daily. At about the end of the treatment she danced all one night without the slightest ill consequences following. For a particular reason, a physical examination was delayed; and as she got better, it was never made. Nearly six months later, she is still perfectly well, and there has been no return of the previous disease.

It cannot be denied that disordered menstruation is almost every day to be met with by the practicing physician, and the leucorrhœa, prolapsus, and even ulceration of cervix uteri, is frequently met with, even in young unmarried women of sixteen or eighteen years of age. I believe that the treatment here advocated—that of giving firmness to all the tissues, and a proper direction to the circulating fluids, and increased nutrition in those organs specially implicated—by a proper use of the muscles, is based upon the true pathology of the cases under consideration. Setting aside those diseases of the uterine organs arising from accidental causes in strong women, we have the vast majority remaining which would legitimately come within the benefits of this treatment. Though the true physician will never hesitate to do his duty, yet to be obliged to make repeated personal examination of delicate young ladies, and indeed of any lady, who are so unfortunate as to require topical medication, is often as disagreeable to him as to his patient; and any treatment that will diminish the necessity, and lessen the frequency of such examination, ought to be hailed with joy by the profession and the public. Experience proves that, in the treatment here advocated, such an examination is not always necessary—even where there is undoubted uterine disease—and more frequently need not be repeated after the true condition of the organs is ascertained. The prolapsed uterus will resume its place, or at least it gives no longer symptoms of displacement, the ulcerations heal, and pain and soreness subside under a physiological course of treatment;

and still more important, the patient is almost insured, so long as she keeps her muscles strong, and blood pure and properly circulated, from a recurrence of the disease. But not less beneficial is the treatment here advocated, to a class of females who, as the French say, "watch themselves live;" who are far from being well, yet have no particular disease, but who seize upon every symptom, and magnify it to the cause of all their troubles—and now-a-days the uterus receives its full share of their attention—and who are never satisfied except when being treated for their favorite symptom, though it may have little or nothing to do with their condition. To such, this treatment answers the indications completely. It gives them something to do; diverts their attention from a local trouble to the general system; and the development of muscle acts as a counter-irritant to the morbid nervous state, and is attended in these cases with the best results.

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A Case of Poisoning by Opium—Death—Post-mortem. By WILLIAM C. ROGERS, M.D., Green Island, Albany Co., N. Y.

William McGarrigle, an ornamental painter, 25 years of age, of intemperate habits, while laboring under a slight attack of delirium tremens, took *one half ounce* of laudanum, from the effects of which he died in *four* hours. He came into his boarding-house about 11 A. M., June 14, asked his landlady for some laudanum and a table-spoon, filled the latter from an ounce vial of laudanum which she gave him, drank it off in her presence, remarked that "if he could get a few hours' sleep he would not die this time," and laid down on his bed with all his clothes on except his coat. At 11.15 A. M., his landlady went in to see him, and found him asleep. At 11.30 he was asleep, snoring loudly and sweating profusely. His sleep to her appeared natural. At 11.50 she found him breathing irregularly and loudly, frothing at the mouth, and of a livid color. Being somewhat alarmed, she sent for a friend, who arrived in eight or ten minutes, recognized at once the dangers of the case, hurried a messenger off for a physician, and immediately ordered frictions to the extremities and gave a table-spoonful of powdered alum, which operated promptly as an emetic, causing the ejection of a small quantity of chocolate-colored fluid, having a faint narcotic odor, and strongly impregnated with rum. I arrived at the patient's bedside at 12.15 P. M., found him breathing stertorously, not to exceed twice a minute; of a deep livid color;

wholly insensible; pulse full, quick, and readily compressed; pupils contracted, and insensible to the light; skin cold and covered with a cold perspiration, standing in beads over the surface of the body. Had him laid on the floor, in the middle of a large room, cleared his throat and mouth, and employed Marshall Hall's Ready Method, in connection with frictions to the surface, coffee internally, and strong mustard sinapisms to the spine and epigastrium. But a small quantity of the coffee was swallowed; all efforts to produce emesis failed; the Ready Method was used perseveringly for 2½ hours, with temporary good effects upon the respiration, the patient being enabled thereby to breathe regularly at intervals for two or three minutes, but with no permanent effects upon either the respiration or circulation. Dr. Charles Freiot, of Troy, used the stomach-pump about 2 P. M., but with no effect; the stomach appeared to be quite empty of all fluids. Despite all efforts, the patient died about 3 P. M.

A coroner's inquest was held at 7½ P. M. The jury demanded a *post-mortem* examination, which was made. The stomach only was examined, and was found to contain about four fluid ounces of dark, coffee-colored fluid, having a faint narcotic odor, and without the odor of rum or other alcoholic stimulant. The mucous membrane was reddened, and much softened in spots near the cardiac extremity. These diseased patches were five or six in number, and did not each exceed the area of a dime.

Mrs. G., the landlady, testified that McGarrigle had been on a *spree* for many days past; that he had a slight attack of the *horrors;* that he was in the habit of using laudanum freely whenever he found himself laboring under the premonitory symptoms of the *horrors*, as he had learned from an extensive and oft-repeated experience that a few hours' sleep, thus induced at such times, would save him from a prolonged attack of this terrible disease. He appeared as usual when he came in in the morning; he had not had any laudanum to her knowledge except that which he took in her presence; he took but a single table-spoonful; he had not eaten a full meal to her knowledge in many days, at least six or seven.

Dr. W. C. Rogers, the physician in attendance, testified substantially as above: that there were no appearances in the stomach to indicate the presence or action of any irritant poison; that the lesions were not of a character to produce death; that all the symptoms would indicate poisoning by some narcotic poison, probably opium; that half a fluid ounce of laudanum, of the strength prescribed by the U. S. Dispensatory, *might* produce death even in a person laboring

under delirium tremens, though usually a larger quantity, in divided doses, is borne with impunity; that where persons are accustomed to the use of any narcotic, a much greater quantity is necessary to produce a narcotic effect; that laudanum or opium would produce its effect more rapidly when taken into an empty stomach, than when taken after a meal; that the evidence on record is sufficient to rank opium among the *cumulative* poisons in certain constitutions.

Other testimony was taken, but as it is immaterial to the points we desire to illustrate, it will be omitted. The jury brought in a verdict of accidental poisoning by opium. The points of interest in this case are three: A young man with delirium tremens takes *half a fluid ounce* of laudanum; in *fifteen minutes* he is found asleep; in *thirty minutes* he is evidently narcotized; in *fifty minutes* the narcotism is profound; and, despite all efforts, dies in less than *four hours* from taking the opiate.

There is no evidence to show that he had taken any opium, or preparation thereof, before taking the half ounce at 11 A. M. That he was in the habit of taking laudanum to induce sleep when laboring under the horrors, is evident, from Mrs. G's testimony, and that of his room-mate, who testified on the inquest to that fact, and also, that McGarrigle had had no sleep for many days and nights preceding his demise. *If he had* taken any, she saw no indications of it: he was known to have visited several dram-shops during the morning for rum, but in none of them had he taken any opium in any form; nor had he been where he could have got any that morning. If he took any, it must have been the night before; and then we have an example of the *accumulative* properties of this tremendous narcotic. (*Vide* Taylor on *Poisons*, Griffith's edition, 1 vol., 8vo, p. 479.) But setting aside this view of the case as unsupported by evidence, as possible, but not probable, we have a man laboring under the delirium tremens, destroyed by half a fluid ounce of laudanum, equivalent to about ten grains of solid opium. The smallest fatal dose of solid opium noted is *four grains*. (*Med. Gaz.*, XXXIII., 236. Taylor, *op. cit.*, p. 479.) This was taken after a full meal, by a strong, able-bodied man, aged thirty-two. The smallest fatal dose of laudanum is *two drachms*. (Ed. *Med. & Surg. Journ.*, July, 1840. Taylor, *op. cit.*, p. 480.) The patient was a robust man, aged fifty-six; he died in twelve hours from taking the dose. Dr. Taylor mentions a case seen by himself, in which *half a fluid ounce*, taken by mistake for tincture of rhubarb, proved fatal to a woman in twenty-two hours.

McGarrigle died in less than four hours from taking the poison.

The usual period at which death takes place is from six to twelve hours. Where the patient lives beyond the latter period, he usually recovers. Taylor cites a case fatal in *five hours*. Christison cites a case fatal in five, and one fatal in three hours. Beck quotes a case fatal in two and a half hours. Taylor quotes a case of a soldier, fatal in three-quarters of an hour after taking one ounce of laudanum. These cases lose their value, as the details are not stated.

McGarrigle had drank repeatedly before taking the laudanum; he was, moreover, laboring under delirium tremens at the time; he was, in a measure, accustomed to the use of laudanum, and though the stomach was empty of all food, and partly filled with rum or other alcoholic stimulant, yet, the smallness of the dose, the rapidity of its action, and the early period at which death took place, are remarkable, and entitle the case to a permanent record.

Three Operations for Vesico-Vaginal Fistula, performed by G. W. MILTENBERGER, M.D., Professor of Obstetrics, University of Maryland. Reported by CLINTON WAGNER, M.D., of the Baltimore Infirmary.

CASE I.—Mary, a negro girl, æt. 18, entered the Baltimore Infirmary April 17th, 1858.

She stated that, two months previous to entering the infirmary, she was taken in labor, which, after the lapse of seventy-two hours, was terminated by the removal of the child, with the forceps. From the long-continued pressure of the head of the child in the lower strait, sloughing supervened, which resulted in a vesico-vaginal fistula. The fistula was one inch in length, and situated near the junction of the bladder with the urethra. On the 21st May the operation was performed, the night previous to which an aperient had been administered, and an enema one hour before commencing the operation.

A chair in an inverted position was placed upon a low bed, and upon this she was laid, with her face looking towards the floor, and her buttocks elevated; her lower extremities were stretched as far apart as possible, and then tightly bound to the legs of the chair; after which chloroform was administered freely, and when she had become fully under its influence the operation was commenced.

The edges of the fistula, which had become callous, were pared, so as to obtain a fresh surface. In order that union might the more readily take place, Dr. Sim's method was adopted: four sutures were

sufficient to close the orifice, and effectually prevent the passage of urine through the fistula. The operation lasted 1¾ hours, during the whole of which time she was kept fully under the influence of chloroform.

After the operation, the self-retaining catheter was introduced, and Pulv. G. Opii, gr. i., was given every four hours, to prevent an action of the bowels.

On the fourth day, the opium acting as an irritant to the intestinal canal, Pulv. G. Kino, grs. ii., was combined with it.

The case progressed very favorably, and on the tenth day the sutures were removed, perfect union having taken place. The catheter was retained until the thirteenth day, when it was withdrawn.

The patient remained an inmate of the hospital until July 3d, when she was discharged as cured.

On July 23d she was readmitted into the infirmary. She stated that, whilst ascending a flight of stairs with a burden, she experienced a sensation of something having suddenly given way, and immediately became conscious of urine escaping through the fistula.

Upon making an examination, it was discovered that a very small portion of the cicatrix had given way; the actual cautery was applied to this opening, but failed to produce union; another operation was then deemed expedient, but her general condition not then being favorable, she was discharged for a few weeks, in order to recruit her health and strength.

On September 1st the second operation was performed. After having been placed in the position above mentioned, and chloroform administered, the operation was commenced. On this occasion the method of Dr. Bozeman, with the clamp and perforated shot, was adopted; three shot were sufficient to close the orifice.

The operation lasted one hour, after which the self-retaining catheter was introduced, and Pulv. G. Opii, gr. i., every four hours, was given.

On the ninth day the clamp was removed, and the catheter on the thirteenth, perfect union having taken place.. On the 29th September she left the hospital perfectly cured; and notwithstanding she had been repeatedly warned of the dangers which would attend another labor, at the present time she is in the fifth month of pregnancy.

CASE II.—Sarah Ann, a negro girl, æt. 20, entered the Baltimore Infirmary May 4th, 1859.

She stated that on Wednesday, March 17th, 1858, she was taken

in labor, which lasted until the night of the Sunday following, at which time the child was removed with the aid of instruments.

The fistula was supposed to be dependent upon the same causes which produced the one in the preceding case—long-continued pressure; it was about three-fourths of an inch in length, and situated near the neck of the bladder.

On the 23d May the operation was performed. She was placed in the usual position, and chloroform was administered freely; the edges of the fistula were freshened as in the other case, and the interrupted suture with the perforated shot, without the bar or clamp, was used; four shot were sufficient to bring the edges in direct apposition; the operation lasted only 30 minutes, after which the self-retaining catheter was introduced, and Pulv. G. Opii, gr. i., every four hours, was given, to prevent an action of the bowels; this was continued until the eighth day, and on the 11th day the sutures were removed, perfect union having taken place; the catheter was withdrawn on the thirteenth day. At this time, her bowels not having been acted upon since the commencement of the operation, an aperient was given, which had the desired effect. She continued to improve rapidly, and on the 14th June left the hospital cured.

Danger from Inhalation of Chloroform.

At the session of the *Société de Chirurgie*, Paris, held March 9, 1859, a paper was presented by M. Verneuil from Dr. Hayward, of Boston. From the report furnished by the *Gazette des Hôpitaux*, we learn that Dr. H. claims that, independent of any accusation as to the impurity of the substance, its too free use in large quantities, the rashness or imprudence of surgeons, that its use should be abolished; that, in fact, where death has occurred, the cause of the same has not been discovered, and that no precaution could certainly prevent the fatal result.

Is it necessary to abandon anæsthesia, this priceless blessing both to patients and surgeons? This would not be necessary, if we could replace chloroform by a substance *equally efficacious*, as easily to be administered, and perfectly innocent. Rectified sulphuric ether possesses all these properties. Dr. H. has employed it in hundreds of cases, in which perfect insensibility and immobility were produced, without the slightest unpleasant effect.

Less active than chloroform, ether has never required more than

eight minutes to produce complete anæsthesia. Much less time is needed, if it be used without any admixture of atmospheric air, as it was found in the Hospital at Naples, where the effect was produced in twenty-two seconds; but this method sometimes produces violent cough, and induces the fear of asphyxia. Palasciano, who also employs it in this way, has never met any serious symptoms; the slight inconveniences produced by it being quickly dissipated. Ether is thus as efficacious as chloroform, produces complete insensibility, its effects are more transient, and it excites less frequently vomiting, nausea, and cephalalgia. It can be administered readily by means of a concave sponge, sufficiently large to cover the nose and mouth, and it is very well tolerated when the patient respires regularly. The cases are rare where the odor is dreaded, and even those can respire it without great difficulty.

Dr. H. considers ether as very innocent, since no case of death has, as yet, been attributed to it. To the statement that it has not been very largely used, it may be replied that if it is not employed in England and in many European countries, on the other hand it is largely used in Lyons, Naples, and almost exclusively (?) in the principal hospitals of the United States.

The author, in his own practice, and under his own observation, has never met with an alarming symptom, whatever may have been the age of the patient, (ranging from three weeks to seventy years.)

Diseases of the heart, lungs, brain, or nervous system, in his opinion, do not contraindicate its use; they only require that its vapors should be mixed with a large proportion of air, and inspired slowly. The effect produced by ether is a narcotism—an intoxication analogous to that of alcoholic drinks, but less permanent and dangerous, because the ethereal vapors are much more quickly eliminated than those of alcohol. Ether, however, respired for a long time may destroy life by producing congestion of the brain.

Dr. Hayward's paper was referred to a committee composed of MM. Robert, Richet and Verneuil.

M. ROBERT said that neither anæsthesia or chloroform could be renounced now. The latter was not replaceable with ether, which was often insufficient, and equally dangerous, since what was important in anæsthesia was the loss of feeling, and in consequence the conservative faculty, the loss of which was necessarily dangerous. He employed a mixture of ether and chloroform, equal volumes of each; in this way the first inspiration contained most ether, and the patient was thus more easily accustomed to the agent; the effect was constant, the

anæsthesia more complete, and the period of agitation shorter. In the progress of anæsthesia a moment arrived when all the functions were abolished, except the circulation and respiration; if it were pushed further these functions yielded in turn, commencing with the respiration, and the result was death, although in some cases the circulation ceased first. He was opposed to the use of a sponge in the administration of anæsthetics, and preferred Charrière's instrument devised for the purpose.

M. Giraldes said ether had been abandoned in England and Switzerland. Amylene had been rejected without being sufficiently experimented upon, and it might be useful in certain cases, as suggested by Græfa, to facilitate the examination of diseased eyes in children. When death was produced by chloroform, it was not always caused by injury done to the respiration, as he had known animals die from cardiac syncope. The proportion of deaths, according to the *Westminister Review*, had been 1 in 16,000; the whole number of cases, during twelve years' use, being only 79 throughout the whole civilized world.

M. Legouest stated that the only case of death he had ever seen was one in which *the mixture of ether and chloroform* had been employed. It occurred at the Hotel-Dieu of Lyons, under Valetta. A young man had been subjected *unsuccessfully* to the action of ether, administered on a sponge in a bladder. In order to effect more rapid anæsthesia, some drops of chloroform were poured on the sponge saturated with ether. He made but few inspirations, when he died. The apparatus of Charrière does *not* allow of the administration of a greater or less quantity of chloroform at will. The chloroform which produced bad effects in his hospital was found to be of bad quality. This is the point to be looked after—the chloroform must be pure. Richet and Marjolin have shown that during the war in the East, when the circumstances were not favorable to a rigorous observation of the rules for the administration of chloroform, there were but two cases of death in from 18 to 19,000 operations; the first in an ambulance of the English army, the second in the French ranks, at the Hospital of Kaulidjé, on the Asiatic bank of the Bosphorus. A similar effect had nearly occurred in his own practice in that campaign: the popliteal artery of a young soldier was to be ligated for secondary hæmorrhage. There was apparent death, but artificial respiration being kept up for 15 or 20 minutes, suddenly a natural inspiration occurred, the patient revived, and the surgeon breathed along with him.

In the session of the Society held on the 23d of March a resolution was adopted, returning thanks to Dr. Hayward for his paper. L. H. S.

Oxalate of Lime in Urinary Sediments.

M. Gallois read a memoir on this subject before the Académie des Sciences, the purport of which is contained in the following résumé:

Oxalate of lime is a substance that can be readily recognized in the urine of the healthy human being, at all ages. It appears in considerable proportion under the influence of certain kinds of food, and probably of certain medicines. It is very commonly met with in the urine of the sick, but its excretion does not constitute, in itself, disease. Oxaluria is thus not a morbid entity, but only a symptom common to affections very diverse in character. Nevertheless it is proper to say that oxaluria has been observed very often in spermatorrhœa, and in certain diseases of the nervous system, especially in dyspepsia.

There is a substance which very frequently accompanies oxalate of lime in urinary sediments, as well as in gravel and calculus, and this is crystalized uric acid. The very common co-existence of these two seems to explain the formation of the oxalate in the system.

The connection supposed to exist between oxaluria and diabetes cannot be admitted.

The oxalic acid (and consequently the oxalate of lime) appears to be derived from the uric acid, and should be considered as a higher degree of oxidation of this body, or of the elements that form it, so that wherever uric acid or its elements are found in the body, oxalic acid can be produced under the influence of a higher oxidation, which is effected in the blood.

Oxaluria requires ordinarily no other treatment than that appro priate to the physiological or morbid condition with which it is connected. Hence the contradictory character of the medication heretofore proposed for its treatment: to abstain from food and medicine containing oxalic acid, to use small doses of nitro-chlorhydric acid in a bitter tonic infusion, or nitrate of silver, (in the sandy form of oxaluria,) or colchicum in some cases, or phosphate of lime, &c., &c.

Gallois is satisfied that *alkaline mineral waters* are the *most efficacious* in hindering the excretion of oxalate of lime, especially where there is a coincident deposition of uric acid, a condition which seems to him most frequent.—*Gaz. des Hôpitaux.* L. H. S.

Means of Eliminating Grains of Powder from the Skin. By Prof. Busch, of Bonn.

Prof. Busch has taken the idea of this treatment from the method employed by M. Hebra, for freckles. This method consists in provoking, by applications of a strong solution of corrosive sublimate, an eczematous inflammation, after the cure of which the spots on the skin disappear. As the pigment in freckles is not in the epidermis, but in the *rete mucosum*, (rete Malpighii,) M. Busch concludes that in the development of the eczema the epidermis not only is raised, but that the most superficial layer of the dermis is acted upon; and on this account he has been led to propose this means for eliminating grains of powder from under the skin, when it is a recent case, and they are too numerous to be removed by an instrument.

In a case treated in this manner, M. Busch made use of a solution of corrosive sublimate of the strength of 5 grammes (℈iv.) to a quart of water, the application of which, on account of the recent injury, was not continued more than an hour the first day; but the succeeding days, as the patient felt only a slight burning sensation, these applications were made successively during many hours, until the fifth day, when the whole injured part was covered with a considerable eczematous eruption. The applications were then suppressed, and the next day a part of the vesicles simply dried, while others produced their crusts. When one of these crusts was elevated, on its under surface, grains of powder could be seen, and below these, an epidermis of new formation. As this new epidermis was very tender, M. Busch waited for twenty-four hours, then elevated with a spatula all the crusts and scales of the epidermis, and at the same time a great number of grains of powder. In this manner almost all the grains of powder which were situated between the new and old epidermis were detached, and were easily eliminated, with the exception of a small number, only appreciable by a very close examination, and which were situated deeper than the rest. Whether this method can be employed in old cases, experiment only can prove. M. Busch adds, that all agents strongly irritant can be employed for inducing this inflammation, in order to produce the elimination of the foreign body; but the sublimate solution is preferable, because the degree of irritation can be exactly graduated by it, and after the eczema it produces has disappeared, the skin preserves its normal color.—*Gazette des Hôpitaux, from Virchow's Archives.* D.

Treatment Preventive of the Sequelæ of Measles and Scarlatina.

Many precautions are adopted by physicians to prevent the unfortunate sequelæ of these diseases, and the confinement to the sick-chamber for several weeks after convalescence ranks among them. To avoid this, M. Scoutetten, of Metz, has devised the following method, which we find in the *Gazette Hebdomadaire*, for April 1, 1859:

As soon as convalescence commences, that is to say, when the skin is no longer red with the eruption, he rubs over the whole body slightly warmed oil of sweet almonds or olive oil, and puts the patient in bed again, for two hours. The next day he gives him a tepid bath for an hour, then places him in bed, and if the skin is very dry, a new friction with the oil is made. These two frictions and one bath are usually enough to remove all danger. Still, in severe cases, it is well, to avoid any risk, to repeat the means indicated from time to time, until the skin regains its suppleness. These precautions taken, convalescents may be permitted to go out without fear of bad results.

In order to justify this method and explain its importance, it is necessary to remember the state of the skin in infants affected with measles or scarlet fever. At the commencement of the disease, the dermis is red and swollen; during convalescence the tissues return to their normal condition, but the epidermis, which has been distended, not being elastic, becomes detached, and falls off in the shape of fine powder when the attack of measles has been light, or is removed in large scales when it has been severe, and especially when the eruption has been that of scarlatina. The skin beneath is dry and harsh; perspiration and transpiration are badly performed, and the functions of this important organ are impeded or suspended. When the skin acts badly, the kidneys and the mucous membrane of the air-passages or of the digestive apparatus undertake to supply its place; thence arises a thick, sedimentous, and sometimes albuminous urine, severe diarrhœas, which terminate in emaciation and death; obstinate coughs, sore throats, croup, pneumonias, pleurisies with effusion; finally, serous infiltrations into the areolar tissue of the limbs, or accumulations of liquid in the abdomen, and in other cavities where serous membranes exist. These severe symptoms occur after an exposure to cold of the skin, which inflammation has rendered more sensitive, and the functions of which are interfered with by an inert epidermis, which obstructs its pores. The object of the treatment proposed by M. Scoutetten is to oppose the causes of these symptoms. D.

Treatment of Phthisis by Carbonate of Lead. By M. Beau.

According to M. Beau, it is extremely rare that a case of phthisis is found among workers in lead. The immunity which he had observed in this respect led him to try the efficacy of some of the preparations of this mineral in arresting the progress, and in entirely eradicating the tuberculous diathesis.

He gives the preference in his trials to the carbonate of lead, which preparation being insoluble, he considers as less liable to produce an unfavorable reaction upon the stomach. He administers it in increasing doses, from 10 to 80 centigrammes (2 to 16 grs.) each day, in pill, arresting or suspending the use of it as soon as the patient appears to be sufficiently impregnated; that is, as soon as the symptoms characterizing the first degree of saturnine poisoning appear, such as arthralgia and gesia, lisere, and an icteroid tint.

M. Beau reports five cases, in four of which certain symptoms, especially the cough and the expectoration, seemed to be favorably modified by the use of the carbonate of lead. He does not, however, announce a complete cure, and adds, that as an auxiliary to this medication, it is necessary to support the patient by the best possible means; by nourishing food, wine, tonics, and causing him to observe all the rules of a rational hygiene.—*Gazette des Hôpitaux.* D.

REVIEWS AND BIBLIOGRAPHY.

Five Essays. By J. K. Mitchell, M.D., late Professor of Practice of Medicine, in Jefferson Medical College, of Philadelphia, &c., &c. Edited by his Son, S. Weir Mitchell, M.D. Philadelphia: J. B. Lippincott & Co. 1859.

With one exception, the five Essays which constitute this volume have been previously given to the public. It will, consequently, not be expected that we shall enter into a critical review of the opinions, however novel and somewhat chimerical some of them may seem, which the lamented author has left as a legacy to the profession, and more particularly to those who, as pupils, have listened to that earnest voice which never more can be heard in the clinic and the lecture-room. It must have been a pleasant task for the son to collect and superintend the publication of the thoughts of the father, who has

passed to that bourn where physical ills shall no longer enlist his sympathies or engage his thoughts; and there are doubtless thousands who will be thankful for the opportunity to procure the ever-living thoughts of their dead preceptor.

There are many opinions expressed in the volume before us to which we cannot give our assent, yet to review which at least an entire number of the MONTHLY would be required. We know our readers will thank us for withholding this infliction, and contenting ourselves with a simple synopsis of the contents of Mitchell's Essays.

The first essay is *upon the Cryptogamous Origin of Malarious and Epidemic Fevers*, and occupies nearly 140 pages of the volume. The author differs from all previously expressed opinions in regard to the nature of the epidemic and so-called malarious fevers, in supposing that all such diseases have a *fungous* origin. The reason why the plague, yellow fever, cholera, or the ague prevails, the one in preference to the others, in different, yet, in many instances, similar localities, he thinks is because the fungi differ in different localities. Thus, he says, "The cryptogamous theory will well explain the peculiar domestication of different diseases in different regions which have a similar climate; the plague of Egypt, the yellow fever of the Antilles, and the cholera of India. It accounts, too, for the occasional expansion into unaccustomed places, and their retreat back to their original haunts. Our hypothesis will also enable us to tell why malarious sickness is disproportionate to the character of the seasons; why it infests some tropical countries and spares others; why the dry Maremma abounds with fevers, while the wet shores of Brazil and Australia actually luxuriate in healthfulness." (Page 138.)

To us, these varying developments of disease, in different localities, can as well be accounted for upon the malarious as upon their cryptogamous origin. Grant, if you please, that the isothermal, terrene, and atmospheric relations of Constantinople and New Orleans are not very dissimilar, yet that yellow fever is unknown in the former, while it has often ravaged the latter city. Liebig has demonstrated that animal and vegetable matters, in a state of decomposition, yield different products, according to varying meteorological or sometimes unknown conditions. Hence, we may suppose that, from some cause or causes, the products of animal and vegetable decomposition are different at Constantinople and at New Orleans; giving rise, in the former place, to a miasm deficient in some condition or element requisite for the production of yellow fever. Starch, gum-arabic, and cane sugar are composed of precisely the same elements, and the two latter in pre-

cisely the same proportions; but, from a different arrangement of those elements, their sensible properties are quite dissimilar. From this fact it may be argued that the causative conditions requisite for the production of yellow fever, though all present at Constantinople, have not that peculiar arrangement necessary for the production of the disease. Under these circumstances, these causes will not prove inoperative, but will develop the *plague, cholera, typhus, &c., whichever the conditions are exactly calculated to promote.*

The terrene and atmospheric causative phenomena of epidemic and malarious fevers, and their isothermal relations, are prolific fields of inquiry, and the present occasion somewhat invites us to enter; but having promised to forbear, we do so, reserving for another and more appropriate occasion what we would say upon these subjects.

The author displays much learning in the discussion of his subject, but to us his reasoning seems often quite illogical, certainly inconclusive; while his theory is open to as many, if not more, objections than he urges against the malarious origin of that class of diseases under consideration.

The second essay is on *Animal Magnetism, or Vital Induction*, and occupies 134 pages of the volume. This, to us, is the most interesting paper of the volume. The author enters the difficult and treacherous field of investigation with all his energies, and returns from the labor with a rich harvest of facts, which are presented with that cool and dignified reserve which characterizes the philosopher, unbiased by the dreamy delusions of the enthusiast. For five years Dr. Mitchell pursued his researches, and the results are at least entitled to respect and consideration. The author is a believer in the mesmeric state, but, at the same time, he is a disbeliever in the extravagant and visionary pretensions of most of the professed mesmerists. He believes that about one in ten can be placed in a mesmeric state, independent of or in opposition to his own volition; but he disbelieves that, in that state, men or women can see without eyes, hear without ears, or, in any way, give expression to knowledge not previously known, or at the time surreptitiously imparted. In all experiments upon subjects in the mesmeric state, it is noteworthy that all the mental or emotional demonstrations are entirely suggestive. The subject does and says, on all occasions, what he or she is led to believe that it is expected he or she will do or say. Though a believer in mesmerism, the author exposes the charlatanry and deceptions of the mesmerists with a creditable devotion to his own cautious investigations.

We have not time nor space to give even a synopsis of this able

paper—we recommend its perusal to our readers. In the blind sight-seers and the mesmeric Galens we have never had confidence, and are glad to see the time come when a believer in mesmerism has proved them, from repeated experiments, to be dupes or cheats, and their pretensions altogether delusions. We conclude this part of our notice with a pertinent quotation: "Has mesmerism, after sixty-eight years of zealous labor, presented to science or art one single trophy? It has not, and it remains for the advocates of its intuition to tell us the wherefore." (Page 257.)

The third essay is on the *Penetrativeness of Fluids*, and occupies 50 pages of the book. The fourth essay is on *Penetration of Gases*, and occupies 23 pages. These two essays give evidence of the author's skill in the exact investigations of the laboratory, as well as of the love of truth, and the cautious temper with which he approaches every subject of research. These essays were evidently written previous to the one on the cryptogamous origin of epidemic fevers, and seems to us, perhaps unconsciously to the author, to afford some support and explanation to and of the miasmatic theory.

The fifth and concluding essay is on the *Treatment of Acute and Chronic Rheumatism*, and occupies about 25 pages.

The author believes the disease to be a spinal and not a blood disease. This is in direct opposition to its received pathology, but it is not without plausibility. His treatment consists in local depletion by cups over the spine, evacuants and opiates. If his statements can be relied upon, and upon that point we have no doubts, his success warrants a respectful consideration for his opinions and his practice. We have previously reported two cases of obstinate sciatica, successfully treated with strychnia. (For first case, see AMERICAN MEDICAL MONTHLY for 1857, vol. 8, page 146.) If the centric or spinal nature of rheumatism be established, the *rationale* of such treatment becomes at once apparent.

We have not attempted to give a critical review of the work before us, but to do a more important service to our readers, by giving a synopsis of its contents, that they may the better judge whether they desire to give it a place in their libraries. Though written several years since, the essays were entirely new to us, and we derived much pleasure in their perusal.

The volume is an octavo, bound in muslin, and issued in Lippincott's usually good style. O. C. G.

Poisons in Relation to Medical Jurisprudence and Medicine. By ALFRED SWAINE TAYLOR, M.D., F.R.S., Professor of Medical Jurisprudence and Chemistry in Guy's Hospital, &c., &c. Second American from Second Revised London Edition. 8vo, pp. 755. Blanchard & Lea, Philadelphia. 1859.

The author of this work, who has risen to the most prominent rank among English authors on all subjects relating to legal medicine, is one who is not content to rest the future reputation of a work upon its acquired popularity, but omits no labor and stops at no cost to render the newest edition of his already published works among the very newest, in regard to the subjects treated, of any of the works of the day.

A comparison of each of the successive editions of his treatise on Medical Jurisprudence, from the thin volume which appeared in 1821 to the sixth edition issued by Churchill, in London, in 1858, will show how faithfully he has occupied himself in gathering together new materials, and changing the pages of his volumes by substituting new facts for old ones, where the mention of both would have exceeded the space allotted to the subject treated. In the present edition of the work on poisons, which is intended to be filled with materials of profit to the legal and medical professions, whole chapters have been substituted for old ones in the former edition, in accordance with the author's idea of the requirements of the subject as viewed to-day, and at a period no farther distant than ten years ago.

Toxicology presents so wide a field of inquiry that it would be a hopeless task for a writer to include in one volume of moderate dimensions all the facts and principles involved in its discussion. With this view, our author has excluded a discussion of subjects which belong rather to the history than the practice of this part of medicine, and devoted himself exclusively to an examination of "those substances which, from the frequency of their employment for murder and suicide, are of greater practical importance."

Upon those points which are likely to present themselves in the actual practice of the courts wherever poisons are concerned or suspected, this work offers to the members of the bar and of the medical profession, not only the most recent facts, but reliable deductions as to their application. The cases of Palmer, in which the author appeared in conjunction with Dr. Rees as a witness, of Dove, and the more recent one of Miss Smith in Edinburgh, as well as that of Green in Chicago, are fully detailed. That of Palmer is particularly interesting.

After the decease of Cook, for whose murder Palmer was tried and

found guilty, the stomach and intestines were delivered to Drs. Rees and Taylor for analysis. "On opening the jar," he remarks, "we found the stomach cut open from end to end, turned inside out, with its mucous membrane lying in contact with the intestines." It appears that Palmer threw every obstacle in the way of examination, ordered a coffin for its burial, and but for the timely arrival of Cook's father-in-law and his suspicions of his conduct, would have succeeded. The post-mortem was finally conducted by two young men, one of whom, Newton, was a friend of Palmer, and had secretly supplied him with three grains of strychnia. On the morning of the examination he had taken two glasses of brandy, given by Palmer, and proceeded with his work, with very little knowledge of its true intent, for, as it afterwards appeared, it was the first post-mortem at which he had ever been present. At this examination, at which Palmer was present, everything seems to have been done to destroy the possible evidences of the presence of poison, either by the careless or culpable manner in which it was conducted, and it is somewhat remarkable that in the absence of these evidences a sufficient amount of testimony should have been adduced to fix the guilt upon the prisoner. The whole details of this case, which is one of the most remarkable on record, are here faithfully narrated, by one who, from his personal association with the case, had ample means for obtaining the most reliable information. W.

The New American Cyclopædia: A Popular Dictionary of General Knowledge. Edited by GEORGE RIPLEY and CHARLES A. DANA. Volume VI. Cough—Education. New York: D. Appleton & Co. 1859. 8vo, pp. 772.

The regular appearance of this publication, in accordance with the plan announced by its publishers, gives us additional reason to be proud of the energy and vigor of the book trade of our country. It is a herculean task to prepare an Encyclopædia which shall meet the wants of a people ever advancing to more perfect knowledge, and when moderate success is obtained the authors deserve an expression of gratitude from us. We have already spoken favorably of the volumes of this work as it has left the press, and have no doubt but that its circulation will be most extensive through our land. Generally, the articles are calm and temperate; occasionally showing the bent of the writer, by their inordinate length, and by the treatment of a person in every respect unworthy of notice in a book of reference of

this kind. Fred. Douglas receives forty-eight lines of a description, while Ben. Banneker receives but twenty-five. Both were negroes—the latter a man of most astonishing mathematical abilities, employed in laying out Washington City, recognized by Jefferson and Condorcet on account of his talents—the former a mere garrulous representative of disunionism and sectionalism. Surely this *should not* be, while some of the prominent politicians of the day are omitted. Why should the clairvoyant, Andrew Jackson Davis, have more than ninety lines devoted to a description of his life and performances, while H. Winter Davis, one of the most eloquent men in the House of Representatives, is not considered worthy of a line? We suppose, however, that the editors are often imposed on by their collaborators, and it is our hope that, by pointing out these minor defects, they may be avoided in subsequent volumes. Make the Cyclopædia a national work, and crush all efforts to convert it into anything else.

In the article Drummond Light, the writer says nothing about the real discoverer of the principle on which this means of illumination is constructed. The name of the discoverer has been lost sight of, while that of Drummond, who first employed it practically, has been given to it by the world—a similar case of that of Columbus and Vespuccius. The Drummond Light is a mere application of Hare's Compound Blowpipe. In 1802 Dr. Hare published an account of the immense heating powers of a flame of hydrogen when mixed with oxygen gas in proper proportions, showing that bodies ordinarily infusible could be melted, (Hare fused 28 ounces of platinum,) and that those which were not fused, as quicklime and magnesia, became incandescent, throwing off a beautiful white light. If ever honors were stolen from a man, it was when the name of Drummond was appropriated to the discovery which the genius and untiring industry of the late Professor of Chemistry in the University of Pennsylvania had made and perfected. L. H. S.

SELECTIONS.

On the Indications for Blood-Letting. By Prof. Skoda.

In the course of his clinical lectures, Skoda had occasion to make some remarks on the indications for blood-letting, of which the following is the substance: Venesection is only justifiable when, by reduction of the quantity of the blood, dangerous contingencies, which have a

distinct relation to the general mass of the blood, can be thereby removed. Inflammatory disease is of itself no indication, and equally valueless is the so-called nature of the fever—inflammatory, adynamic, etc. The condition of the pulse, as to strength and feebleness, is more the subjective idea of each individual physician, and cannot, therefore, be adopted as a directing indication for venesection. Real or apparent debility is a term conveying no more certain meaning, for the debility may be either muscular, mental, or merely relates to the senses; while others include in the term diminution of the pulse, or of the temperature, the remarkable observation, that the great muscular debility of many febrile diseases is often much lessened by bleeding, and which led to the supposition of a false debility, produced by oppression of the nerves, removable by blood-letting. But this fact is equally explicable by the consideration that muscular debility diminishes with the diminution of the fever, and this is equally striking whether venesection have been used or no. Only, blood-letting is a new loss, which must be added to that already caused by the febrile movement. Many people can withstand the loss of blood better than others; and there can be no doubt that a certain amount of blood may in some produce derangements only to be speedily removed by blood-letting. That, however, is but an individual case, and can no more be elevated to a general rule, than the similar fact that some individuals cannot bear, in the smallest doses, medicines which in others produce their beneficial effects only in very large ones. Accordingly, we may, in robust individuals, employ blood-letting even to allay certain symptoms not having a distinct connection with the amount of blood; but a favorable result in their cases must never induce us to extend the practice to patients already anæmic, and such practice must be carefully avoided in diseases which tend to terminate in anæmia. Loss of blood will be borne well so long as sufficient remains for the nourishment of the organs. The inevitable alteration in the composition of the blood, consisting, as it does, chiefly in an increase of water, is speedily corrected by the secreting organs. Serious disturbances only present themselves in such as are incapable of replacing the blood lost, or in whom the loss goes on faster than is compatible with due nourishment. Venesections, performed from time to time, are often borne without detriment; how long this may be continued we cannot distinctly say. Blood-letting in acute inflammatory diseases, when not too frequently or too largely practiced, has no influence in hastening or retarding the convalescence; this depending solely on the slower or more speedy return of the diseased organ to its normal state. The sole indication for blood-letting is, therefore, the necessity of subduing dangerous symptoms, whose occurrence has a determinate relation to the amount of blood, and exceptionally, in cases where experience has shown that troublesome symptoms may be thereby relieved; but in such cases the individuality of the patient must be carefully kept in mind. Venesection is always to be avoided in feeble persons, and in attacks which are apt to recur, (as hysteria and hypochondria.)—*Wien Allg. Med. Zeitg.*, 1858, 28, 29, and *Prager Vtljschft.*, 1859, Bd. i.—*Edin. Med. Journ.*

On Jerking Respiration, (respiration saccadée.) By Dr. A. Bourgade. (Archives Générales, November, 1858.) *Brit. and For. Rev., April,* 1859.

Dr. Bourgade is of opinion, and we think justly, that the profession have not paid sufficient attention to interrupted or jerking respiration, as one of the earliest symptoms of pulmonary tubercle. He details nine cases, and states that he has observed others, in which jerking respiration heard at the apex of one lung was the first auscultatory phenomenon indicating the deposition of tubercle subsequently proved by more palpable symptoms, and in part confirmed by post-mortem examination. In discussing the rationale of its production, he quotes one post-mortem examination, which absolutely disproves the views of Messrs. Barth and Roger on this point. They hold that it is due to the presence of the adhesions which are so frequently met with at the apex of the lungs in phthisical subjects. In the case in question there were no adhesions at the apex or about the middle of the lung in which the jerking respiration had been heard. It is to be remembered that the symptom is most commonly met with at a time when no evidence exists of preceding or accompanying pleurisy; the character of the sound and the structure of the parts in which it is found have always seemed to us to justify our attributing it to a partial constriction of the smaller bronchi, owing to adjoining tubercles pressing upon them, the effort of inspiration causing the successive opening of the obstructed passage. We have met with cases in which spasm appeared to be the cause of the constriction; but we hold with Dr. Bourgade that, in the great majority of cases, jerking respiration is a sign of tubercular deposit.

We would endorse the following summary of observations made by Dr. Bourgade. Respiration is jerking when the respiratory murmur presents three or four brief intervals, and the ausculting ear experiences the sensation of a certain difficulty in the expansion of the pulmonary tissue from the prolonged expiratory murmur. The respiratory murmur otherwise preserves its normal timbre, and the symptom is chiefly observed during inspiration; it occurs, but less frequently, during expiration. This change in the respiratory murmur does not persist beyond a limited period; a prolonged expiratory murmur follows, or, more rarely, progressive diminution of the respiratory sound. This fact probably explains the circumstance of the symptom having been overlooked by many hospital physicians, who, seeing phthisis chiefly in its more advanced forms, do not meet with jerking respiration here as frequently as in private or extra-hospital practice. Jerking respiration is commonly limited to the apices of the lungs, which we should explain by the greater resistance of the parietes of these parts favoring the pressure of tubercle upon the adjoining bronchial tubes. When the patient is made to breathe more fully, the symptom is not rendered more palpable, but commonly disappears altogether. Jerking respiration is not always continuous, but at times presents regular intermissions; it may occur at every second, third, or fourth inspiration, sometimes even at greater intervals. It is chiefly at its

first appearance that it presents this character, but when well marked it is commonly continuous; like other auscultatory phenomena, it may vary in strength and precision from day to day.

In concluding his paper, the author, though attributing much more importance to jerking respiration as an early sign of pulmonary tubercle, states he does not regard it as an absolute evidence of the deposit having taken place; for this purpose he justly requires the presence of collateral, general, or local symptoms.—*Charleston Med. Journ.*

On Intermittent Fever; the Result of the Observations made during several Epidemics. DR. HEIDENHAIN, in Marienwerder. (Archiv fur Pathologische Anatomie, Band xiv., Hefte 5 and 6.) *Brit. and For. Rev., April*, 1859.

This paper is one of interest, as bearing upon the question of the change of type of disease generally, as well as on account of the special matter to which the other devotes his attention. Marienwerder, a town of Western Prussia, not far from the delta of the Vistula, is the seat of intermittent fever and its congeners; and Dr. Heidenhain, having been in practice in that town and its vicinity for twenty-eight years, gives us the results of his experience during that period. He commenced his practice in 1831, shortly after cholera had claimed its first victims in the district surrounding Marienwerder. This town and the immediate vicinity had been spared, but instead of cholera there was an epidemic of gastric or bilious febrile conditions, with a remittent, or more frequently, intermittent type. Gastric, bilious, and intermittent fevers almost disappeared when the cholera actually invaded Marienwerder; but the cholera itself assumed an intermittent character of the tertian type in some cases. On the cessation of cholera in 1831, intermittents ceased entirely in Marienwerder, and did not occur in the epidemic form until 1849. Even in the August of 1844, when the valley at the foot of the heights upon which Marienwerder is built was flooded by the Vistula, and after the subsidence of the waters the atmosphere was poisoned with effluvia of decomposing vegetable matter, intermittents did not make their appearance. During these eighteen years febrile intermittents only occurred sporadically; the paroxysm was not ushered in by a severe rigor, but merely by a passing sense of cold, and the other symptoms of fever were not strongly marked. These affections were cured by large doses of quinine. In the place of genuine intermittents, intermittent neuralgic affections made their frequent appearance; the nerves affected were almost exclusively the first and second division of the fifth pair; the patients were affected with severe hemicrania for three or more hours; the forehead, the orbital region, the cheek, half the nose and lip were the seat of the affection; the face was pale, at times slightly swollen, the eye dull, the pulse small, no trace of fever, the hands cool; the type was quotidian or tertian. The paroxysms commonly occurred in

the morning, without premonitory symptoms, and ceased almost as suddenly. Twice the author observed similar neuralgic affections in the nape of the neck, and once in the right tibial nerve; in the last instance the subject affected was a multipara, in whom the neuralgia took the place of the after-pains immediately after confinement; the neuralgia lasted eight hours, then put on the tertian type. In addition to these neuralgic intermittents, the doctor observed a convulsive intermittent disease in children. It occurred between the years of two and nine, and the affection was at times difficult to distinguish from an apoplectic condition, unless reference was had to the intermittent type. Dr. Heidenhain's description is briefly this: The child loses conciousness, the eyes are closed, the pupil enlarged and sluggish, the head hot, the facial muscles are distorted by convulsive movements, the lips quiver or are drawn on one side, permitting the passage of frothy saliva, at times tinged with blood; it is almost impossible to effect deglutition. The extremities are violently thrown about; breathing is short and intermittent; there are suffocative attacks; profuse perspiration breaks out over the body. After four, six, or eight hours, the symptoms abate, and the child appears to wake up exhausted, but otherwise is comparatively healthy.

In the autumn of 1849, with the cholera, all the forms of intermittent fever returned with great frequency; but in 1850 and 1851 they increased still more; and in 1852, the bad year of the cholera, they were at their maximum, but did not, as in 1851, disappear with the cholera, but retained the prominent form of disease until the autumn of 1856, since which time they have diminished. The paroxysms were not characterized by severe rigors, and the cold stage was uniformly short, compared with the length of the hot and sweating stages. The affection attacked all ranks and ages, however favorable the circumstances and healthy the dwellings of the individuals. A characteristic feature during this period was the severe pain which, in the fever, often affected the lumbar and sacral regions, and the tenderness of the last cervical and first dorsal vertebræ. This "spinal irritation" disappeared on the curative effect of the treatment being manifested.

During the period last spoken of, in addition to the neuralgic affection, neuroses of the motor nerves have made their appearance. Intermittent affections of the vaso-motor system of nerves have also been observed, such as intermittent ophthalmia with a tertian type; the pain was unusually severe in these cases, and out of proportion to the severity of the inflammatory symptoms.

Enlargement of the spleen and anasarca are the chief sequelæ which the author has met with. Of the latter he says, that it used, previous to 1854, never to be associated with albuminuria, but that since that time the majority of cases exhibited albuminous urine; these cases commonly proved fatal.

With regard to the treatment of all these various conditions, Dr. Heidenhain recommends that no energetic treatment be adopted during the paroxysms, not even in the convulsive intermittent affection of children. Quinine is his sheet-anchor, given in large doses during

the free intervals; he has found eight grains generally suffice for an adult, given about the middle of the free interval, or immediately after a paroxysm.—*Charleston Med. Journ.*

On the Treatment of Hooping-Cough.

Notwithstanding the notion extensively prevalent, that hooping-cough is uncontrollable by remedies, or that it can only be benefited by change of climate, there is no reason to doubt, that if brought early under treatment, the symptoms may not only be moderated, and other contingent diseases warded off, but its duration may be materially shortened. Enough has been said on the subject to substantiate this assertion. Thirty-five cases brought under treatment, after an average duration of more than three months, were all cured in less than twenty-five days in the aggregate, and would doubtless have experienced the same beneficial result in about the same length of time, had they been brought six or eight weeks earlier. This assertion is further borne out by this fact, that of eighty-seven cases brought for treatment within fourteen days of their commencement, the time occupied by the treatment was still the same as that of the general average, but the whole duration of the complaint was only thirty-seven days, that of the whole number, excluding the neglected cases, being forty-two days, and the term of the decidedly neglected cases, 111 days. Further, of the eighty-seven cases above named, thirty-two had an average of eleven days, in which the whole term of the complaint was thirty-five days; and fifty-five cases, with an average existence of five days on admission, the whole term was reduced to thirty-two days.

The remedies employed were, in the simple cases, or when the complicated cases had been reduced by other treatment to this condition, Dover's powder alone, or combined with camphor, camphor inhalations, emetics, belladonna, and local irritants, but always with either opium (Dover's powder) or belladonna as a principal remedy. Sometimes the Dover's powder was replaced by tincture of opium, given in camphor or other aromatic water.

Opium was commonly given in form of Dover's powder, in doses of one grain, or one or two drops of the tincture in aromatic water, twice or thrice daily. The Dover's powder was frequently combined with an equal quantity of camphor, and sometimes with half a quarter of a grain of calomel, twice or three times daily, for a child twelve months old. This mode of treatment had an excellent effect in many cases. An equally successful result was often obtained by an emetic (five grains or more of Ipecac. Pulv.) given in the morning, and two grains of Dover's powder, with or without camphor, at bedtime; no other medicines in the interim. By these measures fifty-eight cases were treated and cured on an average of twenty-eight days.

Belladonna was used in seventy-six cases. It was given in the form of powder of the leaves, never the extract, as this is an uncertain prep-

aration; and sometimes in form of solution of the nitrate of atropia. When in the form of powder, half a grain, mixed with five grains of sugar, was given to a child twelve months old twice a day; then, after two days, if well tolerated, three times; then four times a day, or oftener, and in larger doses; being gradually increased, until a specific effect was produced. The solution of nitrate of atropia was so prepared as to contain one-ninety-sixth of a grain in a teaspoonful of the liquid; this dose equal to about half a grain of the powdered leaf, so that a teaspoonful of it may be given twice or thrice daily to a child one year old.—*Dr. Whitehead's Report of Clinical Hospital for Diseases of Children.* Manchester, 1859.

On Croup. By Dr. Luzsinsky.

Dr. Luzsinsky, director of the Mariahilf Children's Hospital, Vienna, in a long communication on croup, recommends the following treatment: Every child with a hoarse voice and the peculiar cough, and some fever, must be at once put to bed, and gentle perspiration induced. If, now, the voice becomes clearer, the cough loose, and the nose run, the danger is over. Should, however, the unfavorable symptoms continue or increase, and the breathing become more difficult, then more energetic means must be used. 1. To alter the blood crasis. 2. To prevent the localization of the inflammation in the larynx. 3. To prevent laryngeal spasm. 4. To destroy the membranous exudation, and promote its escape. The first indication is fulfilled by the alkaline carbonates, which dissolve albuminous and fibrinous products. L. gives daily from ½ to 2 drachms of carbonate of potass, dissolved in 2 ounces of water, and sweetened with half an ounce of syrup, till the cough becomes soft and loose. The second indication is best fulfilled by the energetic local application of cold. The whole body is well covered, and kept warm and dry; the neck is bared, and assiduously fomented with ice-cold water, the patient getting at the same time a constant supply of ice-cold milk and water in small quantities; this treatment is continued from one to three days, till the inflammatory symptoms begin to yield, when the cold is gradually left off and more nourishment given. L. objects entirely to local blood-letting, and where the application of cold is objected to, is in the habit of replacing it by a blister, the size of half a crown, on the manubrium of the sternum, which is to be kept open by epispastics. The third indication L. attempts to fulfill by the free exhibition of opium acet. of morphia, $\frac{1}{6}$–$\frac{1}{4}$ gr. in 2 ounces of water, and half an ounce of syrup, to be given at longer or shorter intervals, according to the amount of dyspnœa, cough, and restlessness present. To fulfill the fourth indication, L. sponges the fauces and larynx several times a day with a solution of nitrate of silver, 4–8 grs. in half an ounce of water. When the pseudo-membrane loosens, and the larynx gets filled with tough mucus, impeding the respiration, L. gives emetics,

sulphate of copper 4–8 grs., in ℥ijss. sweetened water, a dessert-spoonful every ½ or ¼ hour. L. is opposed to tracheotomy, but rather inclined to catheterize the trachea. Among 38,000 patients, L. has had 90 cases of croup, (55 boys, 35 girls,) of whom there were—

under 1 year old,		11	4 to 5 years old,		9
1 to 2	..	16	5 to 6	..	15
2 to 3	..	16	6 to 7	..	14
3 to 4	..	8	9	..	1

Of these 90 cases only 15 died. L. groups them in three divisions. The first—characterized by persistent rough voice, short, raw, barking cough, difficult breathing, with occasional sibilant râle, and more or less fever—were 36 in number, and all recovered. The second division comprehended all cases marked by a weak, thin, shrill voice, hollow tubular cough, laborious respiration, feeble and often hissing respiratory murmur, and great restlessness; of such there were 43, of whom 34 recovered, and only 9 died. In the third group the voice was reduced to a faint whisper, the cough choked and scarce audible, and there was great orthopnœa; of such there were 11, of whom 6 died. The result speaks favorably for the practice.—*Journal f. Kinderkrankheiten*, 1857, 9, 10.—*Ed. Med. Journ.*

Observations on the Treatment of Diphtheritic Angina and Laryngitis in Children. By DR. HAUNER.

Both diseases occur only in feeble children, debilitated by previous diseases, mostly, however, in such who have suffered either recently or some time previously from an exanthematous disease. Diphtheritis is contagious, and can be transmitted from sick to previously healthy children; it may become fatal by general infection, pyæmia, or loss of strength, as well as by propagating itself to the larynx, bronchi, and lungs. That treatment will alone be successful which endeavors to stop the progress of the diphtheritic process to important organs, anticipating it, as it were, by local means, and which tries to strengthen the constitution by internal remedies. The antiphlogistic treatment is decidedly obnoxious. Of all local remedies, the author considers nitrate of silver the most efficient; he applies the caustic in substance to the diphtheritic layers in the mouth, on the uvula, throat, etc., and takes care to carry the application somewhat beyond the diseased surface. Instead of the stick, a strong solution of nitrate of silver (℈j.–℥ss. to ℥j. of distilled water) may be used. In regard to the prophylactic value of this local treatment the author observes, that he has not seen a single case of diphtheritis of the mouth and throat in which the disease spread and reached the larynx after having been thus treated. But even in diphtheritic croup nitrate of silver is useful in combination with the internal treatment; the application is, in this case, made by means of a whalebone probang having a pencil of charpie attached to its extremity, or finely-powdered lunar caustic, (gr.

iij.–iv.) quickly blown in through a quill, the tongue being depressed by a spatula. In some cases the author prescribed, at the beginning of the disease, an emetic of ipecacuanha, and found it decidedly useful. In regard to the internal treatment of diphtheritis, it is particularly necessary to enjoin a generous diet, (good broth, Liebig's extract of meat, coffee, beer, wine, &c.) The best internal remedy is quinia, given with alternate doses of chlorate of potassa, (ʒss.–j. to ʒiij.–iv. of distilled water;) the latter remedy exerts a very favorable influence upon the local diseases of the mouth and throat. A useful adjuvant in the treatment of diphtheritic angina and laryngitis is the local application of moist heat by means of compresses soaked in water, and covered over with a dry linen cloth, or other material, to retain the heat and moisture. The author finally cautions against the treatment of diphtheritic croup by bleeding, mercurial ointment, calomel, tartar-emetic, etc. By making a careful examination of the patient, and by taking the constitution and the previous history of the child into consideration, it will not be difficult to distinguish diphtheritic from true laryngeal croup.—*Œsterreichische Jahrbücher für Kinderheilkunde*, 1859, II. 2.

Treatment of Asthma by Stimulants.—Theory of the Modus Operandi of Stimulants.—Illustrated by Coffee.—Curative Influence of Violent Emotion.—Its Action analogous to that of Stimulants: Acts also as a "Nervous Derivative."—Cases. By Hyde Salter, M.D., F.R.S., Assistant-Physician to Charing Cross Hospital.

One of the commonest and best-reputed remedies of asthma, one that is almost sure to have been tried in any case that may come under our observation, and one that in many cases is more efficacious than any other, is strong coffee. To the question, "Have you tried strong coffee?" the asthmatic is pretty sure to answer "Yes;" and he is also pretty sure to add that it gives him relief.

About the *modus operandi* of this remedy I was long puzzled; I could not make it out; and it is only lately that I think I have stumbled upon it. The *rationale* of its efficacy is, I think, to be found, on the one hand, in the physiological effects of coffee—the particular nervous condition that it produces—and, on the other, in a feature in the clinical history of asthma which I have long observed, and of which I think the efficacy of coffee is highly corroborative.

This fact is, that *sleep favors asthma*—that spasm of the bronchial tubes is more prone to occur during the insensibility and lethargy of sleep than during the waking hours, when the senses and the will are active. I have already referred to this in my observations on the "Clinical History of Asthma,"* in explaining why the paroxysm invariably (or almost invariably) chooses the hours of mid-sleep for its onset. Let me just refer to this subject again; for it is both interesting and important, as it explains a curious and very constant phenom-

* *Medico-Chirurgical Review*, July, 1858 and 1859.

enon in asthma—the hour, namely, of the attack—is highly illustrative of its pathology, and furnishes the key to some of its treatment.

I think, then, that sleep favors the development of asthma in two ways:

1st. By producing insensibility to respiratory arrears.

2d. By exalting reflex action.

The way in which sleep favors the development of asthma, by producing insensibility to respiratory arrears, and exalting reflex nervous action, I have already sufficiently explained in the papers on the Clinical History of Asthma, to which I have referred.

There can be no doubt that sleep *does* exalt reflex nervous action. It is a fact, so abundantly inculcated by the history of disease, as hardly to require illustration or proof. The phenomena of epilepsy, cramp, lead tremors, and other examples of deranged muscular action, all teach it. It is just as sleep comes on, just as the will is laid to rest, or during sleep, that these different forms of involuntary muscular contraction most commonly occur. Any one, to convince himself of it, has only to fall asleep sitting on the edge of his chair, in such a position that it shall press on his sciatic nerves. As long as he is awake his legs will be motionless; but the moment he falls asleep they will start up with a plunge and suddenly wake him. As soon as he is awake they are quiet and still again, with no disposition to start, till he again falls asleep, and that moment they start again and wake him; and so he may go on as long as he likes. He changes his position, sits back in his chair, and they start no more. I need not explain what so clearly explains itself. I heard, some years ago, of a case of what might be called chronic traumatic tetanus, in which the source of irritation—the excito-motory stimulant—was extensive disease of the hip-joint. The moment the patient fell asleep he was seized with opisthotonos, which, of course, immediately woke him. On awakening, the tetanus vanished; on again falling asleep, it reappeared; and this alternation of falling asleep and waking continued for weeks, if not for months, the patient getting no continuous rest till he was quite worn out. As long as he was broad awake the tetanus never appeared.* Hosts of similar facts, illustrative of the same truth, might be cited.

Anything that exalts reflex nervous action, increases, of course, the potency of reflex stimuli. Now, I have elsewhere endeavored to show that the phenomena of asthma are, in almost every case, those of excito-motory action, and that the exciting causes of asthma are, in the great majority of instances, such as act by a reflex circuit. They would, therefore, on the asthmatic's falling asleep, immediately acquire a potency they did not before possess, just as the pressure on the sciatic nerve did, in the illustration I have given. Thus it is we see that the asthmatic may gorge himself with unwholesomes, and yet,

* I was further informed, respecting this case, that, after everything else had failed, sleep was procured, with an immunity from the tetanic spasms, by putting the patient into the mesmeric state. In this way he got rest, and greatly improved; but what was the ultimate issue of the case I do not know.

as long as he keeps himself awake, suffer no consequential asthma; the irritant is there, the undigested food is in the stomach, but as long as he is awake, as long as the will is dominant, it is inadequate to the production of reflex phenomena. But let him fall asleep, and in an hour or two the paroxysm will be established.

And not only will *sound sleep* determine, by this exaltation of reflex susceptibility, the production of asthma by its exciting causes, but a small dose of the same condition—sleepiness, drowsiness—will favor the supervention of asthma in a proportionate degree. Not only is drowsiness a premonitory sign of an attack, but a powerful predisposer to it; and the asthmatic knows that he yields to it at his peril. I have often noticed in asthmatics that the sleepiness that is so apt to come on after dinner will be accompanied by a slight asthmatic oppression and wheezing: as the drowsiness deepens, so does the asthma, and in this way it may settle down into an attack; but if the patient rouses himself, or if anything occurs to engross his attention so as to wake him up, broad awake, the asthma quickly vanishes. It is in this way, I think, that is to be explained the fact, that asthmatics can dine out late and unwholesomely with impunity; while, if they dine at the same time and in the same way at home, asthma is sure to come on. At home they want that excitement which at a dinner-party keeps the animal functions in a state of exaltation and the mind vividly awake, and effectually banishes the least approach to drowsiness. Of the fact there is not the slightest doubt. I know an asthmatic who can with impunity dine out at seven o'clock, as dinner-eaters of the nineteenth century are apt to dine—shirk nothing from soup to coffee—walk home at ten o'clock, a distance perhaps of four miles, with the wind of a deer-stalker—go straight to bed, and get up the next morning scathless; but if he were to dine at home at six, or even at five o'clock, he would be wheezing at nine, and by four the next morning downright asthmatic.

I believe a certain amount of the curative influence of fright, or other strong mental emotion, is to be explained in the same way.

"But why," it may be asked, "all this roundabout digression? What has all this to do with the curative influence of coffee?" I believe it is simply its explanation. For, what are the physiological effects of coffee? They consist in the production of a state of mental activity and vivacity, of acuteness of perception and energy of volition, well known to those who have experienced it, and to a certain extent very pleasurable, and which is the very reverse of that abeyance of will and perception which, in drowsiness or sleep, so favors the development of asthma. In sleep, will and sense are suspended; after taking strong coffee, they are not only active, but exalted. It produces rapidity of thought, vivacity of spirits, clearness of apprehension, increases tenfold the working powers, and altogether intensifies mental processes. Not only is there no disposition to sleep, but sleep is impossible: the thoughts hurry one another through the mind; the bodily movements are energetic and rapid; and if the effects of the drug are pushed far, a very unpleasant condition is pro-

duced, something like that of delirium tremens, *minus* its hallucinations. Now, if the suspension of the will, or its depression, favors the production of excito-motory phenomena, and thus favors the development of asthma, is it unreasonable to suppose that its exaltation should prevent or cure it? It *must* do so—if not positively, at least negatively, by removing the predisposing condition. And bearing in mind this marked physiological effect of coffee—that this exaltation of the animal nervous functions is exactly what it produces—it certainly does seem to me reasonable to suppose that this is its *modus operandi*. And if of coffee, then of strong tea, and alcohol, and ammonia, and ether, and other stimulants of undoubted value in asthma.

To show that this is the *rationale* of the cure of asthma by stimulants, I do not think it is necessary to show that it is only when the asthmatic is drowsy, or has been sleeping, that they do good. If anything that rouses the asthmatic to a state of wakefulness will put a stop to asthma that was creeping on him while he was sleeping or sleepy, *à fortiori* anything that carries him beyond a state of mere wakefulness—that gives him an active, not a mere passive wakefulness, will be still more efficacious, and will be adequate to the checking of an attack that, in spite of his being broad awake, was gaining on him.

The very frequency with which coffee gives relief, makes it hardly worth while for me to narrate the history of any cases. I should think, from my own experience, that coffee relieves asthma in two-thirds of the cases in which it is tried. The relief is very unequal, often merely temporary, and sometimes very slight; sometimes it is complete and permanent. It is often taken in the morning; and patients will tell you that, previous to taking their coffee, they are not fit for anything, can hardly move about; but that taking it is immediately followed by freedom of breathing, and an ability to enter at once on their daily occupations.

There are two or three practical hints with regard to the administration of coffee that are worth bearing in mind.

1. It cannot be given too strong. Unless sufficiently strong to produce its characteristic physiological effects it does no good, but rather harm; moreover, if given very strong it need not be given in much bulk, and quantity is a disadvantage—its effect is less rapid, and it oppressively distends the stomach.

2. I think it is best given without sugar and milk—pure *café noir*.

3. It should be given on an empty stomach; if given on a full stomach it often does great harm, by putting a stop to the process of digestion; indeed, so much is this the case, that I consider coffee accompanying a meal, especially late in the day, so peculiarly apt to induce asthma, that it deserves to be classed among its special provocatives. I have mentioned elsewhere the case of an individual who never dared to take the usual after-dinner cup of coffee—it would make the simplest dinner disagree with him. But the same asthmatic

found in strong coffee, on an *empty stomach*, one of his most valuable remedies.*

4. For some reason or other, I don't know why, it seems to act better if given hot—very hot.

I adverted just now to the influence of mental emotion on asthma, and stated my belief that its *modus operandi* was, like that of coffee and other stimulants, by producing an exaltation of sense and will—an intense activity of the intellectual part of nervous action—and proportionately lessening the tendency to excito-motion; and this it does to a much greater degree than stimulant remedies, and its effects are, therefore, proportionately more sudden and complete. It was, indeed, the curative influence of violent emotion, and the observation that it and coffee-taking alike banish that condition in which asthma is most prone to come on, that first suggested to my mind the theory of the action of stimulants on asthma that I have just endeavored to propound. I think, too, that mental emotion acts, if I may so express it, as a nervous derivative. There are many phenomena, both in health and disease, that seem to show that only a certain amount of nervous activity can be in operation at a certain time; and that, if a nervous action of one kind comes into operation, another that had been previously going on is immediately depressed or arrested. Such is the explanation of the well-known experiment of the two dogs, one of which was taken hunting immediately after a meal, while the other was allowed to sleep. In the one that was taken hunting, digestion, on its return, was found hardly commenced; in the other it was completely over, and the stomach empty. In the sleeping dog the whole vital dynamics, not being otherwise employed, were appropriated by the function of digestion; while in the hunted dog they were entirely taken up by its energetic locomotion, and drafted away, as it were, from that nervous superintendence of digestion without which the function cannot be carried on.† The power of strong emotion, or hard study, in retarding digestion, is an analogous fact. Just in the

* Since writing the above, I have received the following account from an asthmatic gentleman, singularly confirmatory of my own observations:

"I used to think," writes my informant, "strong coffee the best of all remedies. I remember one instance especially, only a pattern of many others, but more striking when told. With bent back, high shoulders, and elbows fixed on the chair-arms, I had been laboring for breath all the afternoon. About five o'clock I had two breakfast-cups of strong coffee. The hard breathing disappeared rapidly and completely. My sisters were dancing in the next room, and in less than an hour I was dancing with them, quite free from asthma.

"Of late, coffee has often had an opposite effect upon me. The after-dinner cup of coffee, to which I have been for several years habituated, now produces a sensation of stuffing of the chest, and incapacity of moving about. I believe this is because it stops digestion; and the reason I did not suffer for some years I take to be, that my originally most excellent and enduring stomach could stand it so long, and no longer. Coffee, on an empty stomach, I still deem a most valuable remedy. I do not share the prejudice against putting milk and sugar into coffee that is used as a medicine, provided that it remain *café noir*, and be not made *café au lait*."

† See Dr. John Reid's experiments in Todd's *Cyclopædia of Anatomy*, vol. iii., p. 899; also those of Bernard and of Bischoff, in Müller's *Archiv*, 1843.

same way, I think, the extraordinary activity and exaltation of thought and perception, that characterize the state of mind that the taking of coffee, ether, and other stimulants produces, acts as a nervous derivative in asthma, and diverts from the nervous system of the lungs that morbid activity which engenders the spasm of the bronchial tubes.

The cure of asthma by violent emotion is more sudden and complete than by any other remedy whatever; indeed, I know few things more striking and curious in the whole history of therapeutics. The remedy that stands next in speed and efficacy—tobacco pushed to collapse—takes time, a few minutes at least; but the cure of asthma by sudden alarm takes *no* time; it is instantaneous, the intensest paroxysm ceases on the instant. This is a fact so little known, as far as I can see, and yet so practically important and theoretically interesting, that I think it will not be unprofitable if I endeavor to impress it more deeply by the narration of some cases of its occurrence.

CASE I.—A gentleman suffering an unusually severe attack, so bad that he had been unable to speak or move all day, was suddenly alarmed by the illness of a relative: he ran down two flights of stairs and up again, and administered the restoratives he had procured, and then observed, to his astonishment, that his asthma was gone. This gentleman tells me, that on many other occasions different forms of mental emotion have cured his asthma.

CASE II.—C. R., a confirmed asthmatic, states that, when he was suffering from an unusually severe attack, a fire occurred just opposite his house. Previous to the occurrence of the fire he was in bed, breathing with the greatest difficulty, and unable to move. When the excitement of the fire was over, he found that he had been standing in his night-shirt, looking, with the rest, out of the window, and that he had quite forgotten all about his asthma. His breath was not quite well the rest of the day, but nearly. On another occasion, when he was suffering from an attack, some sudden anxiety arose about two of the members of his family being out late: the alarm from which he suffered relieved his asthma, but not so suddenly as in the case of the fire. On another occasion, a sister of his was seized with sudden illness that seemed to threaten suffocation: he was suffering severely from asthma at the time, and was in bed; he jumped out of bed in great alarm, and found then that his asthma was perfectly cured. He was sufficiently well to run for a doctor, and continued well throughout the day.

CASE III.—Not long ago I was informed by a patient at the hospital, who had suffered greatly for many years, that however severe an attack might be, venereal excitement would almost invariably cure it. He told me also, that, when a youth, he had been guilty of the practice of onanism, and that the unnatural excitement thereby produced had just the same curative effect on his asthma. Indeed, he pleaded this effect of it as a sort of excuse for the practice; and assured me that when his breath was very bad at night he used to resort to it for the purpose of curing it.

I have known two or three cases in which sexual excitement has had just the same effect.

Case IV.—The following account of the curative influence of mental excitement I have received from a medical friend, who has suffered from asthma all his life: "On one occasion I was sitting with fixed elbows on a sofa, breathing hard: a lady came into the room whom I had known very well, and whom I had not seen for several years. I got up to receive her, and sat down again on a music-stool; with no especial purchase, therefore, for the respiratory muscles, and yet with comparative ease of breathing. This ease lasted for about an hour, and then the difficulty of breathing came on again. I attribute the temporary amendment to the diversion of nervous energy. Just the same thing has happened to me more than once. On another occasion I was suffering a good deal at a farm-house. I got on horseback with some difficulty, and an anxious hope that the horse would go quietly, to fetch myself an emetic from a town three miles off. The horse ran away with me. I pulled in, at first weakly and almost despairingly, but the need of exertion brought the power: after a run of about a mile I succeeded in pulling up, and was delighted to find my asthma gone. Another time I was breathing very hard, and a friend engaged me in an argument. At first I could only get out a sentence in successive gasps; but gradually, as I got excited, the hard breathing went off, and I could talk fluently."*

From the foregoing observations, then, I think we may conclude—

That, since the abeyance of the will favors, in proportion to the degree of that abeyance, the development of asthma, and since the effect of strong coffee is to dispel such suspension or depression of volition, and restore the will to its wonted (or even an unwonted) activity, it is by thus exalting the will, and so disfavoring the development of excito-motory action, that this remedy relieves asthma.

That the same interpretation applies to the relief of asthma by all other stimulants whatever.

That thus strong coffee and mental excitement, although apparently so different, belong to the same category of remedies for asthma.—*Edinburgh Medical Journal*, June, 1859.

On Gonorrhœal Rheumatism. By M. Rollet.

Notwithstanding what has been written on the subject, this affection is not universally admitted; and Professor Thiry, of Brussels, has recently formally denied its existence—there being, in his opinion, no rheumatism that can be legitimately called gonorrhœal, but only instances of arthritis coinciding with gonorrhœa, without any relation of cause and effect. M. Rollet, of Lyons, has, however, just published a memoir, in which he maintains the reality and peculiarity of this

* For additional cases of the cure of asthma by mental emotion, I must refer the reader to a paper on the Pathology of Asthma, in the *British and Foreign Medico-Chirurgical Review*, for July, 1858.

form of rheumatism. First, the frequency with which gonorrhœal subjects become affected with rheumatism is greater than it would be if it were a mere coincidence; and next, there is the repetition of the rheumatism so often met with in a given individual on the occurrence of a new, or the revival of an old gonorrhœa. While, too, it resembles ordinary rheumatism, it differs from it markedly, not only in its cause, but in the fact of its rarely affecting the muscles, nerves, or viscera, and, above all, the heart. Another remarkable difference consists in its usually being mono-articular, or at least extending to but very few joints—the knee-joint being that which is much the most frequently attacked, and then the ankle, the other joints suffering much seldomer. Then, again, this form of rheumatism is often accompanied by an iritis, the seat of which is preferentially the anterior layer of the iris, and sometimes the serous membrane lining the posterior surface of the cornea, *i. e.* Desmours' membrane, either wholly or in part.

In the absence of pathological examination, it is difficult to say in what the lesions of gonorrhœal rheumatism differ from those of ordinary rheumatism; but there can be little doubt that they are not identical. At all events, it is certain that the inflammation becomes much more specially and more strongly fixed in the synovial membrane in this form of rheumatism than in the other, and hence the marked tendency to hydrarthritis which has struck all observers; and when it does not affect the joints, it exhibits a preference for the serous membranes, the sheaths of tendons, accidental bursæ, and Desmours' membrane. Clinically, gonorrhœal rheumatism is distinguished by the less acuteness of the inflammatory symptoms, whether general or local, and by a less tendency to suppuration; but, on the other hand, there is a greater tendency to anchylosis, especially in the small joints, and, in predisposed subjects, to white swelling. The disease, again, is excessively rare in women, if it is observed in them at all.

Gonorrhœal rheumatism seems to depend upon its special causes; for the predisposing and determining causes of common rheumatism have seemed to be without influence in the great majority of cases. The abundance of the discharge appears to be the most general condition upon which its production depends. Prior to the rheumatism the discharge has usually been acute, and sometimes very acute; or having become chronic, has revived again. The duration of the discharge does not seem to exert the same influence. When the rheumatism has become developed, it exerts a revulsive effect upon the discharge, this usually sensibly diminishing, although in a third of the cases it remains stationary. M. Rollet has seen it become more abundant only twice, and suppressed but once. The doctrine of metastasis has no foundation; and in treating the disease we must not seek to reproduce the discharge, as this doctrine would indicate; but, on the contrary, endeavor to arrest it as rapidly as possible, inasmuch as, owing to the dependence of the rheumatism upon the urethritis, the slightest exacerbation of the latter might be attended with aggravation of the synovitis. Therefore, copaiba and cubebs, together with injections or cauterization of the canal, should be resorted to. For

the rheumatism itself blood-letting is useful, local bleeding being, in the majority of cases, preferable. When the acute inflammation has been subdued, or if this never existed, and when articular effusion is the predominant feature, the flying blister is a most effectual means. Emetics and purgatives are valuable remedies, as are also vapor baths, especially towards the end of the malady.—*Bulletin de Thérap.*, tome lv., p. 130.—*Med. Times and Gazette.*

On the Treatment of Chronic, Organic Diseases of the Heart. By Professor LEBERT.

The treatment of chronic organic diseases of the heart offers one of the most difficult tasks to the practicing physician; it is nevertheless certain that a proper and thorough treatment of these diseases may do a great deal towards alleviating the condition of the patients, and towards prolonging their lives. Prof. Lebert advises especially, great care with blood-letting, purgatives, and all debilitating measures in the treatment of organic diseases of the heart. In valvular disease he employs venesection but very rarely. If in the course of the disease an acute inflammation, in the form of pericarditis or endocarditis, occurs, it is often useful to extract blood to the amount of six ounces by means of cups or leeches; if, after this, an energetic treatment is still necessary, such advantage will be obtained from the application of a large blister, and the endermatic use of half a grain of morphia daily. The author's observations on the use of digitalis we may omit, as generally known. Most allied to digitalis, in regard to its therapeutic effect, is aconite. Although it acts less heroically and more slowly than digitalis, and does not decidedly diminish the frequency of the pulse, aconite is nevertheless a remedy which is capable of lessening considerably the dyspnœa, palpitation, and the various subjective symptoms of the patient, even the tumultuous excitement of the heart. A very important point to be considered in the treatment of advanced diseases of the heart, is the general cachexia and debility of the patient, gradually developed. Lebert has examined for several years the muscular structure of diseased hearts, in order to see how far the gradual decrease of the functional capacity of the same depends upon changes in the muscular fibre itself. From these investigations it results that very frequently a small degree of fatty degeneration of the primitive cylinders of the muscle of the heart exists, even in cases where the color and consistency of it does not indicate the fact. The gradual increase of general debility and of the local weakness of the heart, the progress of anæmia and hydræmia, lead to the question, what effect tonics, especially iron, would have in organic disease of the heart.

The better the patients are nourished (with avoidance of strongly stimulating food) the longer they resist the evil influence of the disease; the patient should, therefore, not be restricted to a vegetable diet, but a moderate amount of animal food should be allowed with it. Of

beverages, tea, coffee, alcoholic liquors, and wine in large quantities ought to be avoided, whereas infusion of cocoa, or decoction of roasted acorns, are very appropriate, particularly for breakfast. Light beer, or small quantities of old wine mixed with water, may be allowed at the table. Besides an analystic diet, the use of iron is indicated, particularly in the later anæmic and cachectic period of the disease. Lebert recommends especially iron reduced by hydrogen, (gr. ij. at each meal,) or twenty to twenty-five drops of the tinctura ferri pomati, if necessary, in connection with equal parts of tincture of aconite. The tartrate of iron and potassa (three to five grains three times daily) is a very useful preparation; and as the effect of iron is perceptible only then, when its use is persisted in for a long time, it is necessary, occasionally, to make a change in the preparation employed. The author has not derived much advantage from the application of blisters, setons, and moxas.—(*Wien. Medizin. Wochenschrift*, 1858, No. 51, and *Mediz. Neuigk.*, April 2, 1859.)

On the Use of Tannin in large Doses in Albuminous Anasarca. By Dr. GARNIER.

Pure tannin, tannic or gallic acid, was at first prescribed in hæmorrhages and diarrhœa, in pretty small doses, as it was considered a poison. Later, many practitioners recommended its use in nocturnal sweats, in diabetes, and in atonic diseases. Dr. Garnier, of Paris, was induced to try tannin in the albuminous anasarca consecutive to scarlatina, a disease which so obstinately resists ordinary measures. From the observations he has lately published in the *Archives Générales de Médecine*, it results that under the influence of large doses of this agent, the general infiltration of the cellular tissue and the presence of albumen in the urine have simultaneously disappeared. Dr. Garnier gives the following conclusions at the end of his treatise:

1. Tannin, in the dose of fifteen to thirty grains through the day, cures anasarca or œdema which has been passively developed, and coexist with albuminous urine. 2. Its curative action manifests itself by copious urine, which gradually assumes its physiological characters, by perspiration, loose stools, etc. 3. These symptoms appear on the second day of the administration of the tannin. 4 Given in solution of about three to eight grains, tannin does not derange the digestive organs. 5. The action of tannin seems to be primitively directed upon the fluids of the economy, the albuminous principles of which it coagulates and plastifies; its action upon the solids seems to be consecutive, tonic, and astringent.

The facts reported by Dr. Garnier are quite interesting; it is, however, important to remark, that tannin has been given only in cases of transitory albuminuria, following congestion of the kidneys, and that albuminous or granular nephritis is not at all in the question. This distinction should be made in order to appreciate therapeutic methods properly.—*Archives Générales*, January, 1859.

On the Physiological Action of Arsenic. By Dr. H. Gouffier.

The physiological effects of arsenic have been studied by Harles more than by any other; his experiments were on men in good health, and all of them adults. To these he administered arsenious acid in doses varying from a twelfth to a third, and even a fourth of a grain.* The effects he observed were these: increased contractility of the intestine and stomach; increased peristaltic motion of the intestines; similar excitement, but less marked, of the muscles of the extremities; while there was experienced at the same time a slight sense of constriction in the throat. The pulse became more full and frequent, but sunk again, and only beat with greater force and frequency when the dose was increased. In this way can be produced in persons in health attacks of remittent fever, though certainly not such rigors as those of true fever, but only flushing heats, disappearing and returning, and are chiefly felt in the precordial region and the forehead. Such accessions terminate sometimes in partial or general sweats, and at other times merely in a moist state of the skin. This arsenical fever never acquires any regular type. It must be said, however, that it is rare for the excitation to be carried to this degree, and that it is more usual simply to see an augmentation, more or less considerable, of the heat of the body, which seems to have its source in the stomach and precordial region, whence it passes to the rest of the body, but is especially felt in the forehead and eyebrows. To produce these effects, according to Harles, a rather strong dose of arsenic is required. Among the symptoms, too, must be reckoned simple ardor in the œsophagus, extending to the stomach, but is seldom painful when the dose is not considerable. The increase of appetite is remarkable, and is almost always observed when the dose is weak; but a strong dose produces opposite effects, such as diminution, and even complete loss of appetite, nausea, and vomiting. The thirst is more excessive as the quantity of arsenic taken is greater; the alvine evacuations are more frequent and less consistent; but this seldom, if ever, becomes changed into true diarrhœa, and more rarely still into dysentery. The urine is more abundant and miction more frequent. This increased secretion of urine alternates with the cutaneous transpiration, and is the more considerable the drier the skin is observed to be. The arsenic is carried off by the urine, where it may be discovered by chemical tests; consecutively to its absorption, it acts as an excitant of the nervous system. There are then seen, in individuals submitted to its action, remarkable watchfulness, intellectual excitation, with great muscular activity and aptitude for walking; the respiration becomes more facile, and is accompanied with a certain feeling of comfort.

Arsenic has been classed, not without reason, among the alteratives. In the long run it occasions dissolution of the blood, and arsenical cachexy, but it is still a restorative, nevertheless, by the activity and excitement which it gives to the digestive functions. The effects of arsenic on persons in good health, when given in small doses and long

* As a third is greater than a fourth, the translator suspects one-third, as it occurs in the original, must be a misprint for one-sixth.

continued, were but little known till Dr. Tschudi brought to light a singular practice followed in several Austrian and German provinces. The cures which he relates are extremely interesting, and open up a new field for observation; not only have they caused a sensation throughout the scientific press, but the political journals have taken up the facts in order to present them to the curiosity of their readers. Nevertheless, the reception they met with from the public was one rather of doubt than of good-will. One of the most formidable of the mineral poisons becomes a hygienic aliment, and its daily use produces the most beneficial results to the general health! What absurdity! Reason revolts at the idea, and throws nothing but doubt over the authenticity of the facts related.

According to Dr. Kœpl, the subject of arsenic eating cannot be given too much in detail; for a knowledge of the facts are no less necessary to the physician in the practice of his profession than to the medico-legal inquirer. In a case of poisoning tried by the jury of Cili, the accused was acquitted on the simple deposition of a witness, whose testimony led to the belief that the deceased was an arsenic-eater The importance of these details cannot be less in a hygienic view, when it is considered that in certain countries arsenic is used for fattening animals for slaughter, and among jockeys also the custom has become common of giving it to broken-winded horses when it is desired to bring them into good condition for sale.

The peasants in certain parts of Styria, Hungary, and the Tyrol, have this singular custom of eating arsenic, which they take with the twofold view of preserving first and then increasing the freshness of their complexions. The motives which lead them to contract this dangerous habit are usually *coquetterie* and a desire to please; hence it prevails chiefly amongst women and young people: we say *dangerous habit,* for once contracted it cannot easily be laid aside without serious inconveniences, so that these poison-eaters find themselves thus condemned to eat poison for the rest of their lives. Seldom, if ever, do they have recourse to this remedy in vain, for seldom indeed do the results disappoint their expectation. Under its influence their skin acquires, after some weeks, a softness, and their complexion a degree of freshness quite remarkable, nor can the florid aspect of their general health be exceeded. Tschudi had no want of examples, and those which he has related deserve to be noticed. A dairymaid, of the parish of H——, pale and emaciated, thought she might, by giving greater *éclat* to her charms, render Cupid propitious, had recourse, with that view, to the usual means, and after some months, during which she had taken arsenic several times a week, she became stout and blooming, but, increasing imprudently the dose, she poisoned herself, and became thus the victim of her own imprudence and *coquetterie.* It must not be supposed, however, that such serious consequences are common, for arsenic-eaters, for the most part, by beginning with feeble doses, which they progressively but cautiously increase, learn to apportion the agent to the tolerance of their stomachs; and when their system has once become habituated to arsenic, they can take it in considerable quantities without experiencing unpleasant

effects, and without future ill-consequences. "The peasant R——, a sexagenarian, in the enjoyment of excellent health, actually takes at each dose," says Dr. Tschudi, "a portion of arsenic in weight about four grains. This practice, which he inherited from his father, and which, he says, he shall bequeath to his son, he began forty years ago, and you cannot detect in him now the slightest trace of arsenical cachexy."

It is no less remarkable that the arsenic-eaters cannot discontinue their custom without experiencing symptoms similar to those produced by chronic arsenical poisoning—anxiety for their persons, indifference about every one around them, derangement of the digestive functions, accompanied especially with anorexia, a sense of fullness in the stomach, slimy vomiting with ptyalism in the morning, pyrosis, spasmodic constriction of the pharynx, griping, constipation, and, above all, difficult respiration. For all these symptoms the only efficacious treatment is a return to the use of arsenic. An arsenic-eater, sixty-three years of age, from the time he was twenty-nine, made use of arsenic in large doses, but without experiencing anything beyond some alteration and roughness in the voice. In the course of thirty-five years he had taken from twenty to twenty-two ounces. The death of one of his friends, which he erroneously attributed to poisoning, for he was an arsenic-eater like himself, opened his eyes to so strange an abuse; but he had scarcely renounced the use of arsenic ere he began to suffer from violent gastrodynia, while, singular as it may seem, with exception of an attack of pneumonia, he enjoyed the most perfect health during the whole period he took arsenic.

The inhabitants of the districts we have named have recourse to arsenical preperations also with another view—to facilitate respiration during their up-hill journeys. Their object, they say, is to become more *volatile;* and for that purpose they take a bit of arsenious acid, which they leave to dissolve in the mouth; and the German carters, before commencing a difficult ascent, mix it with their horses' fodder.

The period when arsenic began to be used in those countries as a hygienic means is quite unknown, but is supposed to be very remote. A knowledge of the fact has, till these times, been retarded by the pertinacity with which the arsenic-eaters deny the habit to which they have been addicted, retaining their secret till extorted by the fatal sufferings occasioned by their imprudent practice.

There are various experiments in confirmation of the facts related by Dr. Tschudi. Masselot and Trousseau have remarked that in themselves arsenic produced unwonted vigor in the lower extremities, and great aptitude for walking. We may add that we have ourselves had occasion to observe similar results. From the beginning of November, 1856, to the following June, we experimented with four grammes of arseniate of soda, a single dose taken at a time, at intervals of two days, beginning with five milligrammes, and increasing the dose gradually to four centigrammes. During the whole of that period nothing of intolerance was experienced, but the appetite was excessive, and our *embonpoint* became very apparent, especially to per-

sons who were ignorant of our experiment, and who did not fail to ask us the reason of a change in our person so unwonted. The discontinuance of the arsenic was quickly followed by considerable emaciation, but by no other symptom. Lastly, five centigrammes of arsenious acid, taken recently at supper, occasioned us nothing more than nausea and headache the following morning, with slight diarrhœa, all which entirely disappeared in the course of the day.—*Medical Circular.*

On Laryngoscopy. By Prof. CZERMAK.

Under the head of a contribution to laryngoscopy, Prof. Czermak relates a case of chronic loss of voice, of supposed nervous origin, chiefly because it was often suddenly aggravated by emotional causes; in which, by means of a small laryngeal mirror and an ordinary study-lamp, he was enabled distinctly to make out a small dark-colored tumor, of the size of a small green pea, resting, by a tolerably broad base, on the right true vocal chord. The growth had a somewhat uneven surface, and seemed of soft consistence, inasmuch as each vibration of the chord caused its whole substance to tremble, and when closed on by the glottis, it seemed somewhat elastic; the sudden exacerbations of hoarseness, from emotional causes, depended, no doubt, on the more or less erectile character of the growth. C. only saw the patient once in passing, but suggests the propriety of operative interference in such cases, and relates this case chiefly as an encouragement to others to prosecute this method of diagnosis by means of Garcia's laryngeal speculum, recalling, however, the fact that this method of diagnosis dates long previous to Garcia, and referring for proof thereof to Liston's Practical Surgery, London, 1840, p. 417.—*Wiener Wochenschrift.—Va. Med. Journal.*

Gunpowder a Remedy for Toothache and for Scabies. By M. LAFFONT.

All remedies are good, if they cure. M. Laffont recommends his patients to put a table-spoonful of powder into a piece of fine linen, and to apply this little bag to the painful tooth. He has employed this remedy in twenty cases. All the patients told him that it provoked, but only for a few instants, a slight pungent heat in the mouth, but that the toothache completely disappeared.

M. Laffont learned from a traveler that gunpowder was much used in the colonies against scabies. Three parts of powder, incorporated with ten parts of molasses, constitute a mixture, which is rubbed well on the whole body; the next day a bath is taken in water impregnated with soap, and the cure is finished. M. Laffont has used this friction in three cases of scabies, and has cured them radically.—*Journal de Médecine de Bordeaux*, October, 1858.

EDITORIAL AND MISCELLANEOUS.

— The discussion on the personal contagiousness of Yellow Fever still continues at the Academy. While our seaboard from New Orleans to Portland is free from this disease, the Academy, quietly ensconced in their hall at the University, pursue their deliberations upon this form of disease, which very few among its members have ever seen. All, however, are interested in the subject of Quarantine, and it is upon this point of the question which hangs the practical importance to those who are fortunately unfamiliar with the appearances of the fever.

At the first session in July, the question was resumed by Dr. Reese, who reasoned in this wise: If yellow fever be contagious, then it can be imported; and if it can be imported by sea or land, by persons or *fomites*, then it becomes the duty of our Boards of Health to prevent such an importation by the strictest Quarantine that can be possibly devised. But if yellow fever is not contagious, then it cannot be imported, and all Quarantines constructed for this purpose are unnecessary, and are outrages upon commerce and humanity.

Dr. Reese took the ground that it was not contagious, and could not be imported; yet, notwithstanding this, Quarantine he regards as necessary, for ships may be sources of infection until they are properly cleansed and ventilated.

Dr. Reese believes the great difference in opinion existing upon this subject arises from a misunderstanding of the terms employed, especially in reference to the difference between *contagion* and *infection*.

This distinction Dr. R. proposed to elucidate and define. The first, *contagion*, he regarded as applicable to those diseases which are communicable by actual contact, such as syphilis, gonorrhœa, itch, erysipelas, hospital gangrene, morbid poisons found in the dead bodies of animals, or certain acrid vegetables, Egyptian ophthalmia, or other morbid secretions of animal bodies, as from certain mucous membranes, vaccine, and small-pox. Some of these require immediate contact, others inoculation, and others again mediate contact, through the air in close proximity.

Infection is applied to those diseases which do not require actual contact, neither immediate nor mediate. They originate in an atmospheric poison, the inhalation of which may produce the disease in the well by aerial contamination. Such are typhus, ship, jail, and hospital fever, cholera, dengue, yellow fever, remittents and intermittents, puerperal fever, scarlet fever, measles, whooping-cough, mumps, influenza,

diphtherite, &c., all *infectious* in an epidemic atmosphere, but non-contagious; that is, non-communicable from the sick to the well in a healthy atmosphere.

Fomites, Dr. Reese believes, can have no possible application to yellow fever or any infectious disease, but may be the means of propagating contagious diseases, and it is for the purpose of preventing the spread of those diseases that Quarantines are of service. They may serve, too, beneficially in furnishing means for disinfecting infected vessels, not from *contagion*, but from infected air.

Dr. Reese believes in the local or domestic origin of yellow fever, and Quarantines for this are ineffectual; for where the causes of the fever exist, such as the necessary contingencies of climate and soil, heat and moisture, the existence of a miasmatic poison to a certain extent, then the fever will appear in spite of the best efforts of sanitary science to oppose it.

If yellow fever is contagious, he insists that we are daily exposed to it; and if fomites can carry it, then there is no safety for us at any hour of the day, for we are momentarily subjected to being overwhelmed by the importation of this disease by sea, and the landing of cargoes of goods carries the seed of disease to our homes at each arrival from abroad. Nothing of the kind occurring, he is forced to believe in the non-contagiousness of yellow fever, and in the innocuousness of fomites as a means of its propagation.

— The Academy of Medicine, of Paris, at its sitting of the 31st May, witnessed a scene which the Editor of the *Revue de Thérapeutique* calls an *event*. It was a partial renunciation on the part of M. Ricord of one of the articles of his medical faith, for which he has long contended against the greatest odds. M. Ricord has always been a firm supporter of the views of Hunter, in relation to the non-contagiousness of secondary syphilis, but the event of the Academy referred to shows that his views in this respect have undergone a change.

In October last, a letter from the Minister of Public Works, &c., submitted to the Academy the following questions:

1. Are the symptoms of secondary syphilis contagious?

2. Regarded as contagious, are the effects in infants at the breast different from those observable in the adult?

These questions were referred to a committee, composed of MM. Gibert, Velpeau, Ricord, Devergie, and Depaul, who reported through M. Gibert, at the session of May 31, that:

1. There are secondary or constitutional symptoms of syphilis mani-

festly contagious. At the head of these it is necessary to place the mucous papule or flat tubercule.

2. This proposition applies to the nurse and the infant at the breast as well as to other subjects, and there is no reason to suppose that in infants at the breast the results of these symptoms have properties different from those observed in the adult.

Answered so categorically, and inclosing in its terms so complete a denial of the Hunterian doctrine of non-contagion, it was necessary for the great expounder of Hunter to qualify his renunciation, which he did in a long address from the tribune of the Academy, closing as follows:

Therefore, I conclude that the report which should be sent to the Minister, in reply to his demand, should be cautiously expressed, admitting, if you will, the possibility of the contagion of the secondary symptoms, but without specifying anything more at present. *Fiat Lux.*

The conclusions of the report were, however, adopted by the Academy.

— *The Sale of Poisons.*—One of the objects of legislation is the protection of the people, not only from dangers that may arise through attacks of lawlessness and violence upon them, but from accidents to which their own ignorance may subject them, or which a rash and thoughtless course of conduct may bring about. Hence, while laws are passed forbidding the carrying of concealed weapons, and guaranteeing protection to life and limb, it is felt that some measures should be adopted to remove the means of suicide, and the substances which may be pernicious to life from the hands of the ignorant and thoughtless. Still very little is done, in our land, that shall prevent the free access of the unprofessional to the deadliest poisons. These are procurable without being subjected to annoying questions, as to the uses for which they are intended. Persons, altogether unknown to the dispensing apothecary, purchase, hourly, quantities of deadly material that may be the means of death to themselves or their enemies. Children, and those who are perfectly irresponsible, can procure opium and its preparations, purchase arsenic—for the destruction of rats—and obtain the powerful preparations of strychnia and cyanogen. This is an evil which all must admit. The question is, how can it be checked? and this question is a difficult one to answer in a country where liberty is interpreted, by the demagogue, to mean freedom to do as each one pleases. The cry is raised, when prohibitory laws are attempted, that

an effort is made to infringe the liberty of the subject, and in this way the best efforts of good men are crushed.

In England a step was taken in the right direction when the "Act to regulate the Sale of Arsenic" was passed June 5, 1851. Each person selling the article was obliged to keep a record of its sale, the name of the purchaser, and that of the witness in whose presence it was sold. The purchaser was to be known to the vender, or to be certified to by those who were known. Furthermore, no sale of arsenic was to be made in less quantity than 10 pounds, unless it was mixed with soot or indigo in the proportion of one ounce of soot or half an ounce of indigo to one pound of arsenic, in order that the color of the article might be of avail in arousing suspicion with those to whom it might be administered with homicidal intent.

Such an act, although not meeting all the requirements of the case, yet was immeasurably in advance of anything of the kind promulgated by proper authority in this country. We need this, and more, because our laws do not demand any preliminary training from those who are licensed to vend drugs. Any illiterate person, with us, can take up the business of the pharmaceutist, and, through his ignorance, endanger the lives of a whole district in his putting up of prescriptions. A pharmaceutical education is not demanded of him who *professes* a knowledge of the intricate business of pharmacy. He may be as ignorant as the veriest boor, and yet is authorized by law to do exactly that which the most accomplished pharmaceutist can do.

There must be some legal regulations connected with the practice of pharmacy, and the medical profession should leave no stone unturned that may lie in the way of the passage of such regulations. Duty to themselves and society requires their untiring efforts in this direction. But even where such knowledge exists, there must be prohibitory laws as regards the indiscriminate sale of deadly poisons. We shall return to this subject in our next number. L. H. S.

— *The Black Doctor in Paris and Cancer.*—What is cancer? By what can it be recognized? Why is it so called? Since the black doctor Vriès has created such undeserved excitement, questions like the above have found place in circles and saloons, where, heretofore, even the name of this or that disease, unless it properly belonged to the class of nervous affections, was not allowed to be introduced. But now even the woman of fashion attacks her physician for information concerning the horrible visitation, and the pretended physician who is a match for it; this information must be given, and answer accommo-

dated to so delicate an audience. He gives it, and nearly in the following words:

Cancer is a morbid development of peculiar organic tissues; a development whose product must be ever looked upon as a local symptom of a frightful disease affecting the whole system, which mostly increases, almost never retreating, attacks the other tissues within its reach, carries its victim under horrible agony to the grave—which, down to the present time, has bid defiance to all medicinal aid, and has only in exceptional cases been vanquished by the curative efforts of nature. So little is Medicine able to do towards the cure of cancer, so little can she say concerning its causes and origin, and all the things to be avoided, since it may be excited by a blow, a thrust, a puncture, &c., that all this can be considered as empty and nothing. Thus far, the explanations of the physician are as to his knowledge, or rather his ignorance, of cancer. The questioners, however, now take up the second subject, and wish to know what connection there is between it and the black doctor.

With the black doctor? Well, now, he is one of those men, impudent and avaricious, who venture upon territory perfectly strange to themselves and everybody else, understanding how to impose on ignorance, and to profit by the accident that has given him access to one of the first surgeons of the age, and to say to him—the world-renowned Velpeau—with wonderful audacity: I am in possession of a secret which enables me to cure cancer; will you trust your patients to me? And what does Mon. Velpeau? Nothing more nor less than duty indicated to any honest physician—he places a dozen of these unfortunate persons, on whom science had exhausted its efforts, under the orders of the strange charlatan. And what is the result?

The result is told in several satisfactory pamphlets. We have read that of Fauvel, who is employed as an *interne* at Velpeau's Clinic. It bears the title—*La vraie vérité sur Mr. Vriès, dit le Docteur noire*, beginning with a biography of the exotic physician, in which it is especially noticed, that he is not a negro, but rather a mulatto with a yellow color, black, curly hair, dark eyes, and a beautiful, full beard. He is probably 56 years of age, tall, with very regular features, and becomes furious with rage whenever any one is so imprudent as to call him a negro. "I a negro!" he cries out; "look here!" and stripping up his coat and shirt-sleeves, shows an arm of really dazzling whiteness.

The son of the island of Surinam has found in Dr. Fauvel a very severe judge and unmerciful biographer, who enrolls him among the

quacks (*Marktschreier*) who vend, at cheap rates, *theriac* and wonderful draughts in the public squares and cross-roads. *Vriès*—so he is called in the pamphlet—is an impostor, who preys in a heartless way on the sufferings of his fellow-men, and thus, in his operations, resembles the sanguinary spider that ensnares its victims, sucking their life-blood until death is their fate.

Among the favorite expressions of the black doctor are the following: "I do not cure by gangrene! I shall overthrow old medicine! I establish new principles!" Fauvel assures us, that it may be more easy for him to establish a new system of medicine, as he is fundamentally ignorant of the old. Rage prevents the adventurer from contradicting. His biography relates that, when the yellow fever first appeared in Brazil, and Rio Janeiro was full of sick, a want of physicians was experienced. Vriès, although possessing neither medical knowledge nor a diploma, immediately asked permission to go on board the ships, and to attempt the treatment of those affected there. His request was granted; whereupon, he treated the sick sailors in true negro style, partly with lemon-juice, and partly with browned coffee, and succeeded in obtaining enormous fees by publishing the most incredible pretensions, in the midst of the general distress. With a shamelessness that almost could be called *naïve*, he published in the public journals, among others, the following conditions of treatment: 3,000 francs at the commencement of the treatment, 3,000 francs during its progress, and a like amount at its termination. Although this publication called forth public indignation, yet he pocketed within a few days 90,000 francs in fees.

From Brazil, he removed the scene of his charlatan profits to London, where, however, he played a failing game. Similar fortune accompanied him at the Hôpital St. Louis, in Paris, where, during a whole year, no cure was made. Lately he has undertaken to experiment on the cancer-patients in Velpeau's wards, but he has not been able to furnish the slightest improvement in any patient.

Prof. Velpeau has, however, at a late session of the Paris Academy of Medicine, pronounced sentence on this audacious mountebank. It appears from the report read by V., that Fauvel had reported correctly concerning the adventurer, and that none of the cancer-patients had experienced any improvement. In every one, the course of the disease had not changed an iota; all were worse; some were dying, and one was already dead. The tinctures and salves which were to be endowed with specific virtues, are, for the most part, of an innocent character, prepared from well-known West Indian plants.

The Academy resolved to lay Velpeau's report officially before the proper authorities. The question of Velpeau, whether this man should be denied further admission to his wards, was directly answered by Daverne, the general director of public charity, who was present—that, every proper guarantee having been removed, from that time on, an end should be put to the injurious practice of the foreign adventurer—a statement which was received with thunders of applause. Such is the history of the black doctor on the Seine!—(*Wiener Med. Wochenschrift*, April, 1859. L. H. S.

— *Female Medical College in London.*—A correspondent of the *Vienna Weekly Medical Times* thus writes, in the number for April 23 of this year, concerning female doctors in London: "An invasion of young American life, full of freedom and activity, upon the old, rotten, and mouldering civilization of Europe, is the dream of all the socialists, communists, and other honorable practical men, who have come into unpleasant conflict with European constitutions, and turning their covered heads from the mother-land and its future, greet on the other side of the ocean the rising sun of human destiny. Even England, practical, calculating England, that will never barter a present penny for a future shilling, has suffered itself to be seized by such horrible pictures, and takes the field with all the force and earnestness of law against the members of the Phœnix band, who would free Ireland with American soldiers, and besiege Old England. Less threatening, indeed, and eager for battle, but, on account of its more insinuating loveliness, so much the more certain of victory is an American invasion, which has already indeed been made, and has unfolded its banner in the heart of England—the invasion of medical Bloomerism, of Crinoline-managing Therapeia, that, at present, in the person of its most distinguished representative, Dr. Elizabeth Blackwell, ascends above the doctor's horizon as a threatening cloud. This generous young lady will be recollected as having studied in Paris and London, having graduated in one of the countless colleges in America, afterwards practiced in New York, and founded (?) a Female College for the study of medicine. The impulse given by her was so transporting that already over two hundred Yankee daughters, to whom malevolent fate appears to have denied the palm of domestic life, have undertaken their studies at this university, and now, armed with lancet and uterine syringe, form a respectable body for the conquest of a future share in medical practice with the female sex. Not content with this brilliant success, Miss Blackwell has turned to Europe, to enable it to enjoy a part in the benefits arising from her labors. Eight days ago, Miss

Blackwell gave her first lecture, and described, from a cathedrá decorated with flowers, with enthusiasm, how it was the peculiar calling of woman to mitigate and heal disease, and how man, with brutal injustice, had arrogated this calling to himself and held it as a monopoly. This disgraceful banishment of woman from the most special department of her activity is no more to be endured, and so she advised the numerous sisters assembled to take what had been withheld from them, and by the power of facts to convince the world how much it would be in the wrong, if it disputed any longer the right of the *genus femininus* destined by nature for the curative art. Enthusiastic cheers followed this address; and immediately a wealthy lady, trembling with eager aspirations, entering as a sophomore (Brandfuchs) in the faculty to be founded, convened a meeting at her villa in St. John's Wood.

Here was discussed (whether energetically or not, any one may decide for himself who has ever had the honor to be present at a large assemblage of ladies) whether they should proceed with the erection of a Hospital and Clinic. The moderate ones proposed that they should first found an institution for the education of nurses, for which purpose Lady Byron, the widow of the poet, would place a house at their disposal. Loud groans, terrible expressions of insulted honor, were opposed to this resolution: "We are free English women, no Dutch deaconesses; no French Gray Sisters; we will not serve and help like Miss Nightingale; we will govern and manage; *we will go the whole hog*." And then the memorable resolution was proposed, to found an institution for the instruction of female physicians, with a hospital and dispensary; and a rich fellow-soldier immediately proffered £5,000 sterling for its foundation, with £300 yearly for a series of years. (It must be understood that the donor, like all those concerned in the meeting, had *fully* attained the age of majority, so that her ability to dispose of her property cannot be doubted in a legal point of view.) We can thus hope, in a short time, to see "The Medical College for Young Ladies" developing itself in full activity, conducted by Miss Blackwell, who has been reserved for the Deaness' cap, and her sister, also a graduate, who will officiate as *Vice-Deaness*. Whether for the remaining chairs male instruction will be provisionally employed, or America will send, from the number of her superfluous Professoresses, some to assist, remains at present a matter of doubt. Curiosity inquires whether the new Medical Act, which has just come into life, will include in its category these doctoresses. The law speaks only of *medical gentlemen*, and it recognizes only those who are registered as free from

military and jury service. These latter immunities will surely rejoice the doctoresses of the future, as they will be established along with their legal qualifications for practice, which an act of Parliament shall determine, and, under the auspices of a Queen, it is to be hoped that no ungallantry will be visited on the female sex. L. H. S.

— The Trustees of the Fiske Fund, at the annual meeting of the Rhode Island Medical Society, held in Providence June 1st, 1859, announced the premium of two hundred dollars offered by them in 1858, for the best dissertation on the following subject:

"*The effect of the use of alcoholic liquors in tubercular disease, or in constitutions predisposed to such disease,*" had been awarded to the author of the dissertation bearing the motto:

"*Occasio præceps experientia fallax judicium difficile.*"

And upon breaking the seal of the accompanying packet, they learned that the successful competitor was John Bell, M.D., of New York.

They proposed the following subjects for 1860:

1st. Diphtheria; its nature and treatment, with an account of the history of its prevalence in different countries.

2d. The morbid effects of retention in the blood of the elements of the urinary secretion.

For the best dissertation on either of these subjects the Trustees will pay the sum of one hundred dollars.

— We continue our extracts from *Dr. Mercer Adam's Medical Notes from the Continent*, published in the *Edinburgh Medical Journal*, by giving the remainder of the article on the University of Würzburg, which includes a sketch of the celebrated accoucheur, Scanzoni.

Scanzoni next demands our attention. He it was who attended the Empress of all the Russias at her last accouchement, and was presented with the munificent fee of about £5,000, perhaps the largest *honorarium* which any continental physician ever received. The *prestige* with which his favorable reception at the Russian Court invested him; his undoubted skill, and widely-spread fame, as an authority in female diseases, have rendered him the most celebrated and popular of continental accoucheurs. Every summer crowds of the French, German, and Russian nobility and aristocracy flock to Würzburg to consult him; and the principal hotels there during the season are like so many fashionable hospitals, filled with his lady patients. I remember that I considered myself very fortunate in getting possession of the only vacant apartments in the *Kron-Prinz*, just as they were vacated by a *Gräfin*, or German Countess, who had been under Scanzoni's care. Nor is he only busily employed during the summer months; for when the *Kurzeit*, or season, is over at the Spas, when the pleasure

seekers and invalids have left Baden-Baden, and when the gambling-rooms of Wiesbaden and Hombourg are deserted alike by the fools and blacklegs who had thronged them in summer, the little spas of Kissengen and Brückenau, in Bavaria, preserve their vitality, being constantly frequented by visitors, who desire to be in proximity to the great obstetric physician of Würzburg. Scanzoni has earned his great reputation while still comparatively young. He is a man of forty, slightly above the average height, and with a slim, well-made figure. His complexion is fresh, and his long, light-brown hair, carefully brushed back from a large, well-developed brow, falls in negligent masses behind. He has a cheerful, open countenance, and a merry eye; his face generally wears a smile, and a touch of quiet humor lurks about the angles of his mouth. His manners are peculiarly affable, and all who have enjoyed the pleasure of his society must retain, as I do, the most delightful recollections of his friendly courtesy. Scanzoni's unprecedented success has not lost him to science. We all know how often this is the result of a man gaining the ear of the great public, and becoming what is called a "fashionable physician;" how often he ceases to investigate disease, or to contribute to medical literature as in days gone by; and how often the clink of golden guineas dulls his ear to the calls of science. There are among us, no doubt, many most honorable exceptions—men who scorn all fashionable quackery, and who, in the midst of an extensive and harassing practice, still contrive to cultivate science and medical literature with quite as much success as their less busily employed brethren. Hofrath Scanzoni is a man of this stamp, and he fully deserves his fame; for he continues to be as active and enthusiastic in the investigation of all that relates to obstetrics as he was in former days, when he was comparatively unknown.

The works of Scanzoni, like those of his colleague, Kölliker, are now so familiar to all scientific obstetricians—although, singular to say, no English translation of them has yet appeared—that any special reference to their contents is quite unnecessary. His *Manual of Midwifery*, now in its third edition, is a most complete treatise on the subject; and his work on *Female Diseases* is eminently practical in all its details. He has recently commenced a periodical specially devoted to obstetrical science, which promises to be a very valuable addition to this department of professional literature. It is entitled *Contributions to Midwifery and Gynæcology*, and contains, not only contributions from his own pen, but also from many other writers of note. In the third part, recently published, Scanzoni relates a most interesting case of death induced by passing carbonic acid gas into the uterine cavity. The reader is doubtless aware that, of late, carbonic acid has been extensively used, not only as a local anæsthetic of undoubted efficacy, but also as a means of exciting the muscular activity of the uterus, in the induction of premature labor. The unfortunate patient was a woman aged thirty, who had a large, painful, fleshy tumor, of bluish-red color, and as large as the fist, attached to the vulva; and who had also a disease of the cervix, and, what

afterwards proved to be, a large dropsical cyst of the uterus. Before commencing an operation for her relief, a stream of carbonic acid, as an anæsthetic, was passed into the vaginal canal; but hardly had two or three cubic inches of the gas entered the cervix, when the patient screamed out, "The air is entering my abdomen, my head, and my neck!" Alarming symptoms immediately ensued; great rigidity of the whole body; labored respiration; small pulse, and coldness of the extremities. In spite of all the remedies applied, the patient sank, one and three quarter hours after the introduction of the gas into the vagina. Scanzoni considers that the death may be accounted for in two ways: *firstly*, by supposing that the gas entered one of the large uterine vessels and occasioned a fatal result, just as sometimes happens from the entrance of air into the veins in surgical operations; or *secondly*, by the hypothesis of a veritable intoxication, produced by the gas. He admits that objections may be raised against both of these views, but he considers that the first theory is more likely to be correct than the second. The first hypothesis seems opposed by the fact that, on the careful examination of the uterus, not a single injured or gaping vessel could be found, which could admit the gas into the circulation; and, moreover, it is worthy of remark, that death did not occur for an hour and three quarters after the introduction of the gas, whereas, on the entrance of air into the veins, the fatal result usually takes place very quickly—sometimes in a few minutes. Against the intoxication theory may be adduced the facts, that proportionably very large doses of carbonic acid may be brought into contact with the blood, through the medium of the respiratory and digestive passages, without any poisonous effects being produced; and further, that, in numerous instances, this gas has been passed for a long time into the vagina, without giving rise to any dangerous symptoms whatever.

As a clinical instructor, Scanzoni surpasses most obstetrical teachers in rendering his pupils adepts in correct diagnosis. I remember hearing him deliver a clinical lecture on the differential diagnosis of fibroid pelvic tumors, from pregnancy, fibrous tumors and polypi of the uterus, which was quite a master-piece for its lucidity and simplicity. He has large clinical wards for patients with female diseases allotted to his care in the Julius-Spital; and he gives instruction in practical midwifery in the *Entbindungs-Anstalt*, or Lying-in Hospital, a handsome new building, near the Julius-Spital. This institution, which is principally supported by allowances from the Government exchequer, and also, in part, by the fees of the students and midwives who attend it, is well worthy of the medical school of Würzburg. It is intended for the reception and care of poor women at their confinements; for the shelter and private delivery of pregnant women who wish their accouchements to be kept secret; and for affording a good school for the instruction of medical students and midwives in practical obstetricy. The very poor are, of course, received gratuitously, but nearly all the patients contribute something for their maintenance and treatment. The rates charged vary according to the accommodation afforded, etc.; and the patients are divided in three classes: the first pay 2s. 6d.,

the second 1s. 2d., and the third as low as 3d. a day. Patients of the latter class, however, in consideration of the low rate of board charged, are expected, if strong and well, to render assistance in the general household work of the establishment. The maximum length of residence allowed in the *Entbindungs-Anstalt* is fixed at six weeks, but exceptions are made in favor of poor women who are in ill health, and demand medical attention during pregnancy, and also in the case of rich patients who desire a refuge within its walls for a longer period. On the reception of a patient into the hospital, the following particulars are recorded in a book: Name, surname, age, and place of birth; date of admission; number of pregnancy—its beginning, its present stage; time of expected confinement; any personal peculiarities, etc., worthy of notice; and columns are further provided for the registration of the date of the discharge, and whether or not the mother was accompanied by her child. The institution contains about 130 beds, and about 50 are, on an average, constantly occupied. The number of births averages about 350 annually. The whole of the interior is furnished with a view to elegance and comfort; and the system of ventilation throughout the building is quite unexceptionable. Around the hospital are neatly-laid-out gardens, which serve as airing-grounds for the patients. Each of the first-class patients is allotted a neat little room for herself, which is elegantly fitted up with furniture made of walnut wood, consisting of a bed, table, sofa, chest of drawers, and several chairs—with occasionally an extra bed for the attendant nurse. The second-class patients have also separate apartments, similarly fitted up, but with furniture of a plainer description. In each room a cosy little child's cot stands beside the bed of the mother. Patients of the third class sleep in dormitories, which are well lighted, and exceedingly clean and comfortable. In one part of the establishment there is a suite of about six or eight apartments, which is called the *Geheime-Abtheilung*, or secret department. This feature distinguishes many of the German Lying-in Hospitals—as we shall afterwards have occasion to mention when speaking of the Vienna hospitals—and it enables the victims of seduction and illicit love to conceal their shame from the open gaze of the world. Here, the young lady, who has "loved, not wisely, but too well," may retire from society before her disgrace becomes apparent—her friends believing meanwhile in some pleasing fiction, that she has gone on a tour to visit England, or to enjoy the gaieties of Paris. Here she enters, seen by no human eye, save that of the hospital attendants, who are all trustworthy, and sworn to implicit secrecy; here she lives till her confinement is past—never called by her name, but merely designated by a number; and when that event is over she again passes out into the world, and perhaps talks of the celebrities she has seen in Pall Mall or Rotten Row, or of the fascinations and beauties of the Champs-Elysées. The object, in providing such facilities for the concealment of illegitimate births, has doubtless been the prevention of criminal abortion (a crime as heinous as murder in the eyes of the Roman Catholic Church) and infanticide; but the effect of these provisions on the public morals cannot be very good.

For the reception of puerperal women there are four excellent wards, with water-closets attached; and there are also sick-rooms for patients who have abnormal deviations from the ordinary process of recovery after labor. Each sick-chamber has a little kitchen annexed to it, for preparing cataplasms, cooking food, etc. There are lavatories in all the passages; and I was shown one or two large and cheerful work-rooms, where great numbers of the poorer patients were all busily employed—as is the custom with the German peasantry—spinning away with their "rock and wee pickle tow."

In the upper part of the *Anstalt* is a large hall or ampitheatre, called the *Entbindungs-Saal*, or accouchement-room, wherein the patients of the third class are delivered by the students, under the direction of the professor or the assistant physician. Seats are arranged, in a circular form, round the room, for the accommodation of the students; and in the centre of the space which they inclose stands an obstetrical bed, which is something quite unique It resembles in general appearance the ordinary German beds, which are simply long and not very broad wooden boxes, raised on four legs, and having no posts or curtain-hangings of any kind. This bed, however, rests on a strong, central, circular pivot, which enables it to be turned round easily in every direction. It also admits of being separated, transversely through its centre, into two halves; and this is done when turning, or any instrumental interference, is necessary. The lower half being then withdrawn, and the patient placed in the lithotomy position, the operator enjoys great freedom of action in every direction. The bed is also furnished with two movable wooden handles, which can be shifted higher or lower for the convenience of the patient, and by grasping these she can have a firm support during the labor-pains. Whenever a patient is seized with labor-pains, the clinical students are specially summoned to attend at the *Entbindungs-Saal* and witness her delivery. One of their number is selected to conduct the case, under the superintendence of the professor or his assistants. It cannot be denied that there are many advantages connected with this mode of teaching clinical midwifery, but the publicity and exposure which it entails are attendant evils, that render it repugnant to British notions of propriety, and preclude the possibility of its importation into this country.

Professor Scanzoni kindly accompanied me through the whole of the excellent museum attached to this hospital, and showed me his collection of valuable obstetric instruments. His new cephalotribe struck me as a very beautifully devised instrument, infinitely simpler in its construction, and easier in its working, than the cephalotribes of other physicians. In Germany, this instrument has completely superseded the perforator and crotchet in craniotomy cases; and I feel quite convinced, from what I have seen of its use, that if British accoucheurs would only give it a fair trial, that it would soon come into general employment in this country also. Scanzoni's cephalotribe is not more difficult of application than the ordinary forceps; it is easily worked, and is devoid of all the dangers to the mother attendant on the em-

ployment of the old-fashioned craniotomy instruments. The museum contains a large collection of interesting anatomical preparations. Among them is a curious specimen of a uterus, with a rudimentary appendix on its left side, in which an ovum—which had descended from the right ovary, and had traveled thither through the fundus of the large uterine cavity—was developed into a fœtus of four or five months old. The mother died at this stage of her extra-uterine pregnancy, although she had before been thrice safely delivered of children, and had once aborted with twins. At the *post-mortem* examination, the ruptured sac of the fœtal membranes was found in the appendix I have referred to, which constituted a true horn of the uterus. This horn or appendix was attached externally to the left fallopian tube and ovary, and on its internal or right side it was united to the fundus of the uterus by a band of connective tissue. A narrow passage perforated this connective tissue, which admitted of the passage of a probe, and constituted a true communication between the fundus and the appendix. No cicatrix was found in the left ovary; but in the ovarium of the right side there was a distinct corpus luteum, about six lines in length, which indicated the point from which the ovum came, which, after wandering through the whole of the uterus proper, found its way along the narrow passage into the abnormal horn, and was there developed into a fœtus. Probably no similar instance of the wanderings of an ovum in the human subject is upon record; although Bischoff, the embryologist, was aware of their occasionally traveling in this manner in the lower animals. The peculiar abnormality is also very uncommon. I believe that Rokitansky only knew of one similar case of a rudimentary appendix attached to a uterus.

The museum contains many fine specimens of the various deformities of the pelvis, and among them is a preparation of great interest, illustrating the curious anomaly, first described by Kiwisch, which is termed by Lambl, of Prague, Spondylolisthesis. This deformity consists in a dislocation forward of the fifth lumbar vertebra and the upper segment of the sacrum into the hollow of the pelvis. This preparation has been minutely described and accurately figured by Dr. Lambl, in the last part of Scanzoni's *Beiträge*.

We have still much to say concerning other professors and teachers of the Würzburg school, but the length to which the present paper has already run forbids me entering into details. Scherer, the professor of chemistry, is well known as one of the best organic chemists; Linhart, formerly teacher of surgery at Vienna, is an able clinical professor, a very expert operator, and author of a capital treatise on operative surgery. The oldest professor, the venerable Hofrath von Textor, lectures on surgical instruments, and their uses; the Hofrath, Dr. von Marcus, teaches psychology and history of medicine; and Professor Rienecker gives excellent lectures and clinical instruction on the diseases of children. Ophthalmology is taught by Professor von Welz; and comparative anatomy and microscopy by Professor Heinrich Müller. The latter physician is distinguished by his papers on the retina, and has made the finest preparations extant illustrative of its structure.

And now, in conclusion, I would say, very briefly, that I am not acquainted with any school of medicine which, taken all in all, offers more solid advantages to a hard-working student; and a few weeks could not be more profitably employed by any physician from this country, who is able to speak and understand German, (for in Bavaria, even among educated men, the stock of English is rather scanty,) than in attending the cliniques, and hearing the lectures of the distinguished men whom I have mentioned, in the delightful old City of Würzburg.

Virchow's Cellular Pathology.—The object of Dr. Virchow's work on Cellular Pathology is to establish a new foundation for the creation of a Philosophical Medicine. Dr. Virchow desires to put an end to all the one-sided theories now in vogue—to the theories of the humorist and the solidist; to the crasis, exudation, and blastema, iatro-chemical and iatro-mechanical theories. In the place of all these partial stories, he proposes a knowledge of the fine organic processes of cell-life as the only foundation of a rational doctrine of disease. The cell-theory, and its relation to practical medicine, however, is not altogether a novelty; but according to Virchow it has as yet only reached a certain stage of progress. What has been heretofore done, stands as a mere forerunner to his cellular pathology—just as ideas stand to deeds, and imagination to investigation. The foundation upon which he fixes his deductions are actual histological facts, which he places before his disciples in the shape of microscopical preparations and drawings. It will be said by some that there is nothing new in the founding of pathology on histology. And on this score reference may be made to the last edition of Rokitansky's work, which is filled with numerous microscopic representations of diseased structures. It may be indeed asserted that Rokitansky even laid the axe to the root of his earlier, and somewhat humoral, style of pathology. He has rejected the doctrine of Crases. In his third edition, Rokitansky says: "The origin and increase of cells and nuclei take place, either immediately out of a blastema, as free cells and nuclei, or in mother-cells and mother-nuclei, endogenously;" and he adds, "the extra-cellular origin of these elements out of a free blastema cannot be doubted, in my opinion, at the present moment." Virchow, on the other hand, utterly rejects the theory of the origin of free cells in a structureless blastema; just as elsewhere men reject the theory of equivocal generation. He asserts, that only out of ready-formed structures arise cells; and that out of old cells there is a continual growth and development of new cells, *omnis cellula ab cellulâ*. He substitutes a cell-growth theory for the blastema theory. He does not consider exudation as a peculiar product of the capillary vessels, containing plastic and other constituents; but he regards it as an ordinary transudation mixed with the products formed in the diseased structures outside the vessels, among which products may be mentioned fibrin, pus, mucus, etc. Hence, then, according to Virchow, the inflammatory process does not take place in the capillaries, but in the elements of the tissues themselves—in the cells which through an increased activity attract

the blood to them, and become thickened and swollen. In this manner, by cell-growth and by attraction of the juices, likewise arise all other new formations; the homogeneous, as well as the heterologous and malignant, so also new areola, or bony tissues, pus, tubercle, sarcoma, and cancer, the disease of plants, etc. The history of heterologous forms is this: in a particular place, or at a particular time, or in a particular degree, there arises a growth which is not proper to the part. Some other structure normal in some parts of the body is substituted at the part for the structure normal to it, forming what Virchow calls a pathological substitution of tissues. The malignancy of heterologous growths consists in this: that the tissue affected is, by its vascularity, disposed to form a fluid, which is injurious to the structures around. The dyscrasiæ, also, can only arise through the propagation, by means of the blood, of the products of certain existing local affections. For example, the so-called phlogistic or fibrinous crasis depends originally upon a local production of fibrin in an inflamed tissue—fibrin being always a local product, and never arising in the blood. Many other blood-diseases also depend upon diseased states of the spleen and lymphatic glands—those being glands in which white and red blood corpuscles arise. The disease which authors call pyæmia consists partly of thrombosis and emboli, partly of ichonhæmia, of leucocythemia; the substance which forms the obstruction in phlebitis not being pus, but a purulent-like detritis. Pus arises only out of tissues. Life and disease, in fact, cannot be explained by physical or chemical actions, but are the developments and processes of organized elements.—*Schmidt's Jahrb.—Med. Times and Gazette.*

Vital Statistics.—During thirteen years of observation, Dr. Marc D'Espine, a most persevering statician, has collected 16,856 cases of death from 80 different kinds of diseases. Each of the principal causes of death has been studied separately by him; the deaths caused thereby are divided into twelve periods of ages, and at the same time separated according to sex, and habitation in town or country. A second table gives a distribution of deaths through the twelve months of the year, with a similar division of sex and habitation. Finally, in the text, which accompanies each of these instructive tables, the author gives particular details, which he has not introduced into the tables, such as the powerful influences of fortune. This work of comparison and criticism, which must have cost him great labor and researches, is very precious. It enables us to discover the meaning of the differences met with here and there; and it strongly confirms the conclusions offered in England, Belgium, and Geneva. The author, moreover, is a true statician; he well knows the importance of a critical examination of statistical documents, and he very seldom omits subjecting his own materials to it. Here is one example of his method: *Cancer.*—The cancerous diathesis has a decided preference for the upper classes of society. This cruel disease, which between 40 and 70 carries off more than one-ninth of the population, is a cause of death *twice* as frequent in the upper classes than among the general population; (of 1,000 deaths 111 are of the upper class from this

cause, and 52 only of the general;) and as regards sex, 57 women to 32 men. In cancer of the stomach, 52 deaths in the upper classes to 23 general; of the breast, 14 to 5; of the uterus, 13 to 8.—*Medical Times and Gazette.*

Laudanum in Weak Vision of the Aged.—Professor Nascar, of Naples, says, that in the case of aged persons, whose sight is becoming enfeebled, and requires the aid of convex glasses, great advantage is derived, supposing no nervous lesion exists, from painting every evening the eyelids and brow with laudanum, and allowing this to remain on all night.—*Presse Belge*, No. 27.

Chlorate of Potass in Ozæna.—Dr. St. Arnauld recommends the following injection to be thrown in, or inspired, night and morning, after having cleaned out the nares with some injections of tepid water: Chlorate potass, 32 parts; boiling water, 1,000 parts.—*Ibid.*

Sharp Practice.—Hospital gangrene, as we are told by his son, is cured without fail by Dr. Pinilla, at the hospital of St. Jean de Dieu. He covers the gangrenous part with lint, soaked in concentrated sulphuric acid; filling up any hollows with pellets of lint, soaked in the same! "The pain is excessive for two hours, and then gradually diminishes. A hard, dry, adherent surface is left, which separates in eight or ten days, and leaves a healthy-looking wound."—*Medical Times and Gazette.*

M. Deville asserts that the number of dead births in Paris is greatly on the increase. "From all this," he says, "it follows mathematically," (according to statistical mathematics, it should be understood,) "that the number of children born dead in Paris has constantly increased during the last thirty years. In 1829, the number was 5 per 100; in 1839, 9 per cent.; and in 1849, 11 per cent. The causes he attributes to the too frequent use of ergot of rye in parturition, and to criminal abortion."—*Med. Times and Gazette.*

Atropia in Epilepsy.—Dr. Max Maresch, (Wienerzeitschrieft,) physician to the Vienna hospital for the insane, prescribed the atropia in eighteen cases of epilepsy; three were completely cured, and thirteen much improved.

The one-fiftieth of a grain was given every morning before breakfast, for a period of from sixty to ninety days—an intermission of thirty to forty-five days allowed to the patient, and then the medicine again prescribed. It is important that the patient use neither coffee nor cocoa, as the active principles of these counteract the physiological effects of the atropia.

In the above dose, the usual symptoms of belladonna were produced.—*Med. and Surg. Reporter.*

— The vacancies in the New York Medical College have now all been filled. We noticed last month the transfer of Dr. Peaslee from the Chair of Physiology to the Chair of Obstetrics, and the appointment of Dr. Austin Flint, Jr., to the Chair of Physiology and Micro-

scopical Anatomy. The Chair of Anatomy, left vacant by the resignation of Dr. Timothy Childs, has been filled by the appointment of Dr. James Bryan, of Philadelphia. An additional Chair of Surgical Anatomy and General Pathology has been created, and Dr. C. Th. Meier has been appointed to it.

— Preparations are already being made in the several medical institutions of this city for more thorough and extensive courses of medical instruction than were ever before given. The immense facilities for clinical instruction which this city affords are gradually becoming systematized in the hands of public and private teachers; and the coming winter medical students will find greater advantages for the study of the profession they have chosen, both general and as regards special classes of disease, than ever before. We refer to our advertising sheet those of our readers who desire to learn more about our colleges.

— A new medical journal made its appearance with the month of July, notwithstanding the general lamentation over the sudden termination to the existence of several old journals in different parts of the country. The title of the new applicant to the favor of the reading medical community is the *Cleveland Medical Gazette*. It is edited by Dr. Gustave C. E. Weber, Professor of Surgery in the Cleveland Medical College; appears monthly, in octavo form, comprising 32 pages, including title and advertising pages, and is only one dollar a year. We wish for the editor the fullest realization of his most sanguine hopes.

— Another medical periodical, in the form of a newspaper, has just reached us, which already numbers ten issues. It is published monthly, at fifty cents a year, and is called the *Cincinnati Medical News*. We much prefer the form of the *Belmont Medical Journal*, which is published in the same State—at Bridgeport, Ohio—at the same price. The latter journal contains only sixteen pages of a duodecimo size, but with its cover presents a very neat and agreeable appearance, and carries with it a certain air of stability, which to us the newspaper form never has. If the proprietors of the *News* would fold it in pamphlet form, it would carry in its typographical appearance, as well as in its contents, more of the character of a scientific journal. We doubted its character until we had examined its contents, and thought, after we had satisfied ourselves upon this point, how much better it would be in a compact form convenient to keep; for there is something so ephemeral in the appearance of a newspaper. *Stile, de gustibus, &c.*